NATIONAL JUDICIAL ACADEMY

WORKSHOP ON DEVELOPMENT OF INNOVATIVE PEDAGOGIES FOR DELIVERY OF TRAINING

November 1-5, 2015

READING/REFERENCE MATERIAL

COMPiled AND EDITED BY

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Research Fellow

National Judicial Academy
# CONTENTS

## Session 1
What motivates adults to learn?

1. Adult learning: from theory to practice L. Herod, EdD Written 2002; Updated February 2012
4. MANUAL FOR TRAINING OF TRAINERS ON HUMAN DEVELOPMENT, PART – II by Dr. Arabinda Ghosh, JOINT DIRECTOR, Administrative Training Institute, Government of West Bengal Planning Commission – UNDP sponsored project “Strengthening State Plans for Human Development”
5. Train the Trainer: Adult Learning Principles, Office of the Minnesota Secretary of State, 180 State Office Building, 100 Rev. Dr. Martin Luther King Jr. Blvd, Saint Paul, MN 55155

## Session 2
How to increase intrinsic motivation & willingness to share knowledge amongst judge participants?

1. Process and content of continuing learning for judicial Officers by John Goldring BA, LLB (Syd); LLM (Columbia); A judge of the District Court of NSW.
2. REFER: Adult learning: from theory to practice L. Herod, EdD Written 2002; Updated February 2012
3. Innovative Methods of Teaching Dr. Damodharan V. S. ACCA, AICWA and Mr. Rengarajan.V AICWA
4. PARTICIPATORY TRAINING METHODOLOGY AND MATERIALS, MANDAKINI PANT

## Session 3
Natural Learning-Formal Learning-Personal Learning

1. REFER: Adult learning: from theory to practice L. Herod, EdD Written 2002; Updated February 2012
3. REFER: Innovative Methods of Teaching Dr. Damodharan V. S. ACCA, AICWA and Mr. Rengarajan.V AICWA

## Session 4
Andragogical principles: collaborative process of adult learning.

1. REFER: Adult learning: from theory to practice L. Herod, EdD Written 2002; Updated February 2012
2. REFER: Train the Trainer: Adult Learning Principles, Office of the Minnesota Secretary of State, 180 State Office Building, 100 Rev. Dr. Martin Luther King Jr. Blvd, Saint Paul, MN 55155
### Session 5: Designing role play exercise for judicial training

1. **Dynamic Goal-Based Role-Play Simulation on the Web: A Case Study**  
   Author(s): Som Naidu, PhD, Albert Ip, and Roni Linser  
   Published by: International Forum of Educational Technology & Society

2. **Assessment Toolkit: Assessing with role play and simulation, UNSW (Australia);**  
   [https://teaching.unsw.edu.au/assessing-role-play-and-simulation](https://teaching.unsw.edu.au/assessing-role-play-and-simulation); Document Version Date 01/06/2015

3. **REFER**: PARTICIPATORY TRAINING METHODOLOGY AND MATERIALS, MANDAKINI PANT

4. **REFER**: MANUAL FOR TRAINING OF TRAINERS ON HUMAN DEVELOPMENT, PART – II by Dr. Arabinda Ghosh, JOINT DIRECTOR, Administrative Training Institute, Government of West Bengal Planning Commission – UNDP sponsored project “Strengthening State Plans for Human Development”

### Session 6: Designing simulation exercise for judicial training

1. **The Impact of Simulations on Higher-Level Learning**  
   by Chris Silvia, School of Public Affairs and Administration, University of Kansas; *JPAE 18(2)*, 397–422  
   Journal of Public Affairs Education

2. **REFER**: Assessment Toolkit: Assessing with role play and simulation, UNSW (Australia);  
   [https://teaching.unsw.edu.au/assessing-role-play-and-simulation](https://teaching.unsw.edu.au/assessing-role-play-and-simulation); Document Version Date 01/06/2015

3. **REFER**: MANUAL FOR TRAINING OF TRAINERS ON HUMAN DEVELOPMENT, PART – II by Dr. Arabinda Ghosh, JOINT DIRECTOR, Administrative Training Institute, Government of West Bengal Planning Commission – UNDP sponsored project “Strengthening State Plans for Human Development”

### Session 7: Impact of debate participation on transfer of learning

1. **REFER**: MANUAL FOR TRAINING OF TRAINERS ON HUMAN DEVELOPMENT, PART – II by Dr. Arabinda Ghosh, JOINT DIRECTOR, Administrative Training Institute, Government of West Bengal Planning Commission – UNDP sponsored project “Strengthening State Plans for Human Development”

2. **REFER**: Adult learning: from theory to practice L. Herod, EdD Written 2002; Updated February 2012

### Session 8: Designing questionnaire for effectiveness of judicial training

1. **REFER**: MANUAL FOR TRAINING OF TRAINERS ON HUMAN DEVELOPMENT, PART – II by Dr. Arabinda Ghosh, JOINT DIRECTOR, Administrative Training Institute, Government of West Bengal Planning Commission – UNDP sponsored project “Strengthening State Plans for Human Development”

2. **REFER**: Adult learning: from theory to practice L. Herod, EdD Written 2002; Updated February 2012

   (ERIC Document Reproduction Service No. ED492132).
### Session 9
**Impact of power point presentations on transfer of learning**


### Session 10
**Impact of case study method for transfer of learning**

1. **REFER:** MANUAL FOR TRAINING OF TRAINERS ON HUMAN DEVELOPMENT, PART – II by Dr. Arabinda Ghosh, JOINT DIRECTOR, Administrative Training Institute, Government of West Bengal Planning Commission – UNDP sponsored project “Strengthening State Plans for Human Development”


### Session 11
**Impact of documentary /film screening on transfer of learning**


3. **REFER:** MANUAL FOR TRAINING OF TRAINERS ON HUMAN DEVELOPMENT, PART – II by Dr. Arabinda Ghosh, JOINT DIRECTOR, Administrative Training Institute, Government of West Bengal Planning Commission – UNDP sponsored project “Strengthening State Plans for Human Development”

### Session 12
**Impact of theatre play/drama participation on transfer of learning**

1. **REFER:** Adult learning: from theory to practice L. Herod, EdD Written 2002; Updated February 2012

2. **REFER:** MANUAL FOR TRAINING OF TRAINERS ON HUMAN DEVELOPMENT, PART – II by Dr. Arabinda Ghosh, JOINT DIRECTOR, Administrative Training Institute, Government of West Bengal Planning Commission – UNDP sponsored project “Strengthening State Plans for Human Development”

### Session 13
Impact of group activity on transfer of learning

1. **REFER:** Adult learning: from theory to practice. L. Herod, EdD. Written 2002; Updated February 2012.

2. **REFER:** MANUAL FOR TRAINING OF TRAINERS ON HUMAN DEVELOPMENT, PART – II by Dr. Arabinda Ghosh, JOINT DIRECTOR, Administrative Training Institute, Government of West Bengal Planning Commission – UNDP sponsored project “Strengthening State Plans for Human Development”

**Session 14**
Designing game exercise for judicial training

1. **REFER:** MANUAL FOR TRAINING OF TRAINERS ON HUMAN DEVELOPMENT, PART – II by Dr. Arabinda Ghosh, JOINT DIRECTOR, Administrative Training Institute, Government of West Bengal Planning Commission – UNDP sponsored project “Strengthening State Plans for Human Development”

2. **REFER:** Adult learning: from theory to practice. L. Herod, EdD. Written 2002; Updated February 2012.

**Session 15**
Impact of field visits on transfer of learning


2. **REFER:** MANUAL FOR TRAINING OF TRAINERS ON HUMAN DEVELOPMENT, PART – II by Dr. Arabinda Ghosh, JOINT DIRECTOR, Administrative Training Institute, Government of West Bengal Planning Commission – UNDP sponsored project “Strengthening State Plans for Human Development”

**Session 16**
Impact of meeting with stakeholders on transfer of learning

1. **REFER:** MANUAL FOR TRAINING OF TRAINERS ON HUMAN DEVELOPMENT, PART – II by Dr. Arabinda Ghosh, JOINT DIRECTOR, Administrative Training Institute, Government of West Bengal Planning Commission – UNDP sponsored project “Strengthening State Plans for Human Development”
<table>
<thead>
<tr>
<th>DAY 1  1&lt;sup&gt;st&lt;/sup&gt;  November, 2015  Sunday</th>
<th>SESSION 1  10:00 AM – 11:00 AM</th>
<th>SESSION 2  11:30 AM – 12:30 PM</th>
<th>SESSION 3  1:30 PM – 2:30 PM</th>
<th>SESSION 4  3:00 PM – 4:00 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>What motivates adults to learn?</td>
<td>How to increase intrinsic motivation &amp; willingness to share knowledge amongst judge participants?</td>
<td>Natural Learning, Formal Learning, Personal Learning</td>
<td>Andragogical principles: collaborative process of adult learning.</td>
<td>4:00PM–4:30 PM</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Library Reading</td>
</tr>
<tr>
<td>DAY 2  2&lt;sup&gt;nd&lt;/sup&gt;  November, 2015  Monday</td>
<td>SESSION 5  10:00 AM – 11:00 AM</td>
<td>SESSION 6  11:30 AM – 12:30 PM</td>
<td>SESSION 7  1:30 PM – 2:30 PM</td>
<td>SESSION 8  3:00 PM – 4:00 PM</td>
</tr>
<tr>
<td></td>
<td>Designing role play exercise for judicial training</td>
<td>Designing simulation exercise for judicial training</td>
<td>Impact of debate participation on transfer of learning</td>
<td>Designing questionnaire for effectiveness of judicial training</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Library Reading</td>
</tr>
<tr>
<td>DAY 3  3&lt;sup&gt;rd&lt;/sup&gt;  November, 2015  Tuesday</td>
<td>SESSION 9  10:00 AM – 11:00 AM</td>
<td>SESSION 10  11:30 AM – 12:30 PM</td>
<td>SESSION 11  1:30 PM – 2:30 PM</td>
<td>SESSION 12  3:00 PM – 4:00 PM</td>
</tr>
<tr>
<td></td>
<td>Impact of power point presentations on transfer of learning</td>
<td>Impact of case study method for transfer of learning</td>
<td>Impact of documentary /film screening on transfer of learning</td>
<td>Impact of theatre play/drama participation on transfer of learning</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Library Reading</td>
</tr>
<tr>
<td>DAY 4  4&lt;sup&gt;th&lt;/sup&gt;  November, 2015  Wednesday</td>
<td>SESSION 13  10:00 AM – 11:00 AM</td>
<td>SESSION 14  11:30 AM – 12:30 PM</td>
<td>SESSION 15  1:30 PM – 2:30 PM</td>
<td>SESSION 16  3:00 PM – 4:00 PM</td>
</tr>
<tr>
<td></td>
<td>Impact of group activity on transfer of learning</td>
<td>Designing game exercise for judicial training</td>
<td>Impact of field visits on transfer of learning</td>
<td>Impact of meeting with stakeholders on transfer of learning</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Library Reading</td>
</tr>
<tr>
<td>DAY 5  5&lt;sup&gt;th&lt;/sup&gt;  November, 2015  Thursday</td>
<td>SESSION 17  10:00 AM – 11:00 AM</td>
<td>SESSION 18  11:30 AM – 12:30 PM</td>
<td>SESSION 19  1:30 PM – 2:30 PM</td>
<td></td>
</tr>
<tr>
<td>Discrimination activity by participants</td>
<td>Exercise 2 by participants</td>
<td>Exercise 3 by participants</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SESSION 18**  11:30 AM – 12:30 PM
Exercise 2 by participants

**SESSION 19**  1:30 PM – 2:30 PM
Exercise 3 by participants

**SESSION 20**  3:00 PM – 4:00 PM
Exercise 4 by participants

**SESSION 21**  4:00PM–4:30 PM
Library Reading

**SESSION 22**  4:30PM–5:00PM
Computer Skills Training
ADULT LEARNING: FROM THEORY TO PRACTICE

L. Herod, EdD
Written 2002; Updated February 2012
l.hered@yahoo.ca
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>COURSE INFORMATION</td>
<td>1</td>
</tr>
<tr>
<td>MODULE 1 – THEORY</td>
<td>4</td>
</tr>
<tr>
<td>Section 1.1: Introduction</td>
<td>4</td>
</tr>
<tr>
<td>Section 1.2: Learning</td>
<td>5</td>
</tr>
<tr>
<td>1.2.1: Points to Ponder</td>
<td>6</td>
</tr>
<tr>
<td>Section 1.3: Pedagogy – Andragogy</td>
<td>6</td>
</tr>
<tr>
<td>1.3.1: Points to Ponder</td>
<td>9</td>
</tr>
<tr>
<td>Section 1.4: Facilitated Learning</td>
<td>9</td>
</tr>
<tr>
<td>1.4.1: Self-directed Learning</td>
<td>9</td>
</tr>
<tr>
<td>1.4.2: Transformative Learning</td>
<td>10</td>
</tr>
<tr>
<td>1.4.3: Experiential Learning</td>
<td>12</td>
</tr>
<tr>
<td>1.4.4: Contextualized Learning</td>
<td>14</td>
</tr>
<tr>
<td>1.4.5: Points to Ponder</td>
<td>15</td>
</tr>
<tr>
<td>Section 1.5: Conclusion</td>
<td>16</td>
</tr>
<tr>
<td>Section 1.6: Quiz</td>
<td>17</td>
</tr>
<tr>
<td>MODULE 2 – PRACTICE</td>
<td>19</td>
</tr>
<tr>
<td>Section 2.1: Introduction</td>
<td>19</td>
</tr>
<tr>
<td>Section 2.2: The Adult Learner</td>
<td>20</td>
</tr>
<tr>
<td>2.2.1: Characteristics</td>
<td>20</td>
</tr>
<tr>
<td>2.2.2: Intellectual Development</td>
<td>21</td>
</tr>
<tr>
<td>2.2.3: Motivation and Participation</td>
<td>24</td>
</tr>
<tr>
<td>2.2.4: Learning Styles and Multiple Intelligences</td>
<td>26</td>
</tr>
<tr>
<td>2.2.5: Points to Ponder</td>
<td>30</td>
</tr>
<tr>
<td>Section 2.3: The Adult Educator</td>
<td>31</td>
</tr>
<tr>
<td>2.3.1: Underlying Philosophy of Education</td>
<td>31</td>
</tr>
<tr>
<td>2.3.2: Points to Ponder</td>
<td>32</td>
</tr>
</tbody>
</table>
### Section 2.4: The Curriculum 33
- 2.4.1: Content 33
- 2.4.2: Process 37
- 2.4.3: Points to Ponder 39

### Section 2.5: The Learning Environment 39
- 2.5.1: The Affective Domain 39
- 2.5.2: Inclusive Learning Environments 41
- 2.5.3: Points to Ponder 42

### Section 2.6: Organizational Factors 42
- 2.6.1: Points to Ponder 44

### Section 2.7: Conclusion 44

### Section 2.8: Quiz 45

---

### Module 3 – Putting It All Together 47

### Section 3.1: Teaching and Learning along a Continuum 47
- 3.1.1: Influencing Factors 47
- 3.1.2: Pratt’s Model of Direction and Support 49
- 3.1.3: Taylor’s Model of the Learning Cycle 51
- 3.1.4: Points to Ponder 52

### Section 3.2: Professional Development 53
- 3.2.1: Points to Ponder 55

### Section 3.3: Conclusion 55

### Section 3.4: Quiz 57

---

### References & Recommended Reading 59

### Appendices 64

- Appendix A: Scoring Key for Quizzes 64
- Appendix B: Discussion and Additional Activities 65
  - Module 1 65
  - Module 2 72
  - Module 3 82
- Appendix C: Glossary 87
Course Description

*Adult Learning: From Theory to Practice* is an online course intended for tutors in the Canadian adult literacy community. The course may be used by individuals in a stand alone, self-paced format, and/or by groups in various formats, both online and offline.

The course focuses on a teaching-learning continuum, one end of which is directed learning and at the other, facilitated learning. The main point raised and discussed throughout the course is that adult learning is highly individualistic and fluid. As such, it requires that tutors be very flexible and utilize a range of teaching approaches and methods in order to enhance learning.

The first module of the course looks at current adult learning theory, while the second module covers this theory as it relates to the practice of adult education. A third module blends theory and practice and provides tutors with some ideas for dealing with the myriad of factors that influence adult learning. The course includes "Tips for Tutors," but it should be recognized that the intent of the course is to stimulate adult literacy tutors to reflect critically on the notion of a teaching-learning continuum and is not intended as a "how-to" course. An excellent resource for more practical information is Peter Renner’s “The Art of Teaching Adults.”

Each module concludes with a multiple choice quiz. These will assist you to assess your grasp of the foundational information contained in each module (i.e., as discussed in the first section of Module 1, to *acquire* the basic material and process it to a moderate degree). In the online version of the course, the quizzes are interactive in order to provide you with immediate feedback for each question. In the PDF version, the answers are listed in Annex A.

There are also sections entitled “Points to Ponder” scattered throughout each module. These are designed to stimulate critical thinking or deeper level processing of the material (as discussed in the first section of Module 1). There are no right or wrong answers for these; rather, they are issues each individual educator must decide upon for him/herself. A discussion of each point is provided to assist you in considering the complexities of the point/issue. In the online version, each point is linked to the discussion, while in the PDF version the discussions may be found in Annex B. Additional activities for each point have also been provided.

While plain language has been used wherever possible in the course, the terms commonly used by adult educators are included in order to convey the full meaning of these adult learning concepts. However, a “Glossary of Terms” has
been provided in both the online and PDF versions of the course to assist users with the language. Terms that are included in the glossary are bolded throughout the course in both the PDF and online versions.

Finally, a comprehensive list of resources, both text and available on the World Wide Web, has been provided for each of the major concepts in the course.

**Use of Course Material**

The material in this course is freely available to any individuals and/or groups wishing to use it for “not-for-profit” certification, professional development and/or general interest purposes. Users are encouraged to adjust the material as required to suit their particular learning situation. For example, in that the field differs from location to location, groups may wish to include a module relating specifically to adult learning and literacy in their particular region. Some groups may wish to include additional material such as foundations of adult education, adult development, and so on. Or, some users may need to reduce the material somewhat for a professional development session or introductory workshop. Whatever the case, please feel free to adjust the material as needed, as long as it is “not-for-profit.”

**Recommendations for Use**

The course may be used by either individuals in a stand alone, self-paced format, and/or by groups fully online or in a hybrid format as discussed below.

- **Use by Individual Tutors:**
  
  o **As a Stand-Alone, Self Paced Format** - In its most basic form, the course may be used by individual tutors in a stand-alone, self-paced format. The course offers the convenience of “anywhere, anytime” training in that learners can login to the course site from anywhere and at any time of the day or night. As such, it is suitable for tutors when attending face-to-face training is difficult in terms of time and/or distance (e.g., in hard-to-reach rural and Northern areas; with schedules that make face-to-face training hard to fit in). In that the course is “stand-alone,” learners may take as much time as they wish to complete the course. It is recommended, however, that learners not break for an extended period while taking the course as it is difficult to sustain motivation.

  o **Build in Interactivity** - As a stand-alone course, each module ends with an interactive quiz that will allow learners to check their understanding of the information. That said, learning is most effective when there is a degree of interaction with others in that it aids in more deeply processing information and keeping motivation high. As such, it
is recommended that wherever possible, individual learners build in a degree of interactivity. Some suggestions for doing so include:

- **Partner with Another Tutor** – arrange to work on the course the same time as another tutor you know is, so that you can discuss the material as you go along

- **Arrange for a Mentor** – ask a more experienced tutor to guide/support/assess your course work

- **Join an online discussion forum** – Check with your regional adult literacy office to find out if there are any online forums for adult literacy tutors in your province or region.

- **Use by Groups**
  - **Online Format**
    - **Self-paced, Stand Alone, Semi-Supported**: The user group sets up mentoring relationships between individual learners and more experienced tutors. Learners work through the course at their own pace, but have an experienced tutor they could call on to discuss the material, for guidance and support, etc.
    
    - **Self-paced, Fully Supported** – The user group provides mentoring and assesses learning while individual learners work through the course at their own pace.
    
    - **Online Group** – The user group assigns specific timelines for learners to take the course online. In addition to providing support and guidance, the user group takes on an active educative and assessment role. Interactive elements such as an online discussion forum or teleconferencing component are built in.

  - **Hybrid Format (Online and Face-to-face Components)**: While online interaction during a course is cost-effective and easily managed, a degree of face-to-face interaction can enhance learning. As such, a “hybrid” course (i.e., much of the course is completed online, but a degree of in-class interaction is built in) may be desirable for user groups to include. The face-to-face meetings could range from just a few to numerous regular meetings throughout the course depending on the resources and needs of the user group.
SECTION 1.1: INTRODUCTION

The purpose of this course is to provide adult literacy tutors with information regarding teaching and learning with adults. The main theme threaded throughout the course is that teaching and learning are best viewed as a continuum with pedagogy (directed learning) at one end, and andragogy (facilitated learning) at the other. It is suggested that in order for learning to be effective, tutors must move along this continuum based on the educational objective of the learning activity, as well as a number of other influencing factors.

In the interests of keeping the course manageable, detailed information about a pedagogical approach and techniques has not been covered directly in that most of us are familiar with pedagogy through our K-12 education. This is not true of andragogy or facilitated learning, however, and as such we will explore the theory and practice of this approach in much more detail.

Finally, in that reading about and then actually doing something are often two different things, it is recommended that tutors who are using this course in a stand-alone format, especially novice tutors, should try to arrange for the guidance and support of an experienced tutor if at all possible.
For the purposes of this particular course, the most important dimension that must be captured in any definition of learning is the **depth of processing of skills/knowledge**. This refers to the level at which we are engaged in thinking about what is being learned. Jarvis (1992) aptly points out that learning may be distinguished by that which is **non-reflective** and that which is **reflective**. **Non-reflective learning** demands very little thinking on our part such as when we memorize something or perform a simple task (i.e., we take something in or learn a skill in its simplest form without altering it, attaching personal meaning, etc). **Reflective learning**, on the other hand, requires far more thinking on our part. We understand the ‘why’ of the knowledge/skill, can break it down into its component parts and reassemble it in a new form, and so on. While the emphasis in terms of processing is on the intellectual or **cognitive domain**, to some extent processing also involves the **physical** and/or emotional/psychological (termed “**affective**”) **domains**. We will discuss this further under the section, “Multiple Intelligences” and “Learning Styles” in Module 2.

It is helpful to think of learning in this respect as a continuum rather than as an “either-or” proposition. At one end is **non-reflective learning**, while at the other lies **reflective learning**, with varying degrees in between. Where exactly one is on the learning continuum at any given point in time will depend on numerous factors (e.g., the curricular material, objectives, learning style), as will be discussed later in the course. For example, simply memorizing the formula for calculating percentages and completing some worksheets would involve learning towards the non-reflective end of the continuum. If, however, we then look at what other mathematical operations could be used in lieu of percentages, how calculating percentage could be combined with other mathematical operations to produce more complex information, or initiate a discussion about what situations we would need to be able to calculate percentage, we would move toward the
reflective end of the continuum. Processing this skill to a deeper level would mean that students would be able to explain the process to others, consider and assess alternatives, use the skill/knowledge to decide on a course of action, and so on.

Non-reflective learning
(rote or surface level learning)

Reflective learning
(deep level processing)

Definition of Learning
Learning is the cognitive/physical/affective acquisition and processing of skills/knowledge to varying depths, (where “depth” refers to one’s understanding of, ability to manipulate, apply, and/or communicate the skill/knowledge).

1.2.1: Points to Ponder (Please turn to Annex B for a discussion of these points and additional activities)

Reflecting on your own tutoring experiences, have you used an approach that was more toward the andragogical end of the continuum? If so, what were you hoping to gain? If not, why?

SECTION 1.3: PEDAGOGY - ANDRAGOGY

Should similar teaching methods be used across the learning continuum?

If we accept that learning is best viewed as a continuum, it stands to reason that teaching must necessarily follow suit. That is, a range of teaching methods and flexibility is required by educators in order for learning to be effective. As we shall discuss in this section, in the past fifty years the pendulum of adult education has swung from a traditional teacher-centred approach through to a learner-centred approach, and is finally coming to rest at a mid-point that represents a much more balanced approach.

In the early 1970’s, an educator named Malcolm Knowles proposed that adults learn differently than do children and used the term “andragogy” to describe his philosophy of “the art and science of teaching adults.” As the table below highlights, andragogy stood in stark contrast to pedagogy, the traditional approach favoured in education at the time.
Pedagogy (Teacher-centered) | Andragogy (Learner-centered)
---|---
Learners are dependent | Learners are independent, self-directed
Learners are externally motivated (e.g., by rewards, competition, etc) | Learners are intrinsically motivated (i.e., interested in learning for learning’s sake)
The learning environment is formal and characterized by competitiveness and value judgments | The learning environment is more informal and characterized by equality/mutual respect, and cooperation
Planning and assessment is conducted by the teacher | Planning and assessment is a collaborative affair (i.e., teacher and students)
Teaching is characterized by transmittal techniques (e.g., lectures, assigned readings) | Teaching is characterized by inquiry projects, experimentation, independent study
Evaluation is accomplished mainly by external methods (e.g., grades, tests & quizzes) | Evaluation is characterized by self-assessment

(Note: The terms “andragogy” and “pedagogy” can be a mouthful and as such, many adult educators use the terms “directed learning” and “facilitated learning” respectively. For the purposes of this course we will use the terms interchangeably throughout the course.)

![Directed Learning](image1.png)  ![Facilitated Learning](image2.png)

It is prudent at this point to provide examples of situations involving directed and facilitated learning. MacKeracher (1996) suggests that directed learning “helps learners acquire specific skills and knowledge relevant and essential to specific tasks and performance (driving a car, speaking a foreign language, and becoming a certified plumber)” (p. 218). Another example of a directed learning environment would be the military, in particular at novice levels (e.g., recruit training) in which the teacher is the absolute authority, minimal **reflective thinking** is required, and learners have little or no independence. Facilitated
learning, on the other hand, calls for the educator to “act as a catalyst; provide content and process resources; serve as a reflective mirror or alter ego; act as a co-inquirer with learners; and, provide support, guidance and encouragement” (MackKeracher, 1996, p. 220). A graduate student conducting a research study under the guidance of a faculty member would be an excellent example of facilitated learning towards the farthest end of the continuum (i.e., the student is required to hone his/her critical thinking skills, has a collaborative relationship with the teacher, and is permitted a high degree of independence).

Directed Learning

Characterized by lecturing (“sage on the stage”), drills, memorization, question and answer, and immediate feedback. Teacher totally responsible for setting learning objectives and assessing skills/knowledge.

Facilitated Learning

Characterized by guided discussions, group work, problem-based learning. Teacher and students negotiate learning objectives to some extent. Assessment a collaborative effort between teacher and learners.

Characterized by independent projects, student-directed discussions, critical thinking. Teacher acts as resource and “guide on the side.” Students set learning objectives with some guidance from teacher.

To return to the issue of andragogical theory, over time Knowles and many other influential educators came to see that describing andragogy as adult learning and pedagogy as teaching related to children was somewhat of a false distinction. Many children do well when a facilitated teaching approach is used. They are responsible, capable of working collaboratively and constructing (rather than simply receiving) knowledge. Similarly, some adults prefer the structure of a pedagogical classroom and do not fare well in a less directed learning environment. So, if age is not really the most accurate way of defining the difference between these different approaches, what is?

One major distinction that may be made between directed and facilitated learning are their objectives. Whereas at the farthest point to one end of the continuum directed learning seeks to transmit surface knowledge/skills from teacher to student, facilitated learning at the other end seeks to facilitate the deeper processing of knowledge/skills with the guidance of the teacher. Taylor, Marineau & Fiddler (2000, p. 28) offer the following example of an adult student who has been encouraged to reflect more critically on what she is learning:
...I tried reflecting on my learning as it was happening and I became aware for the first time of some of my blind spots—you know, where I wasn't being at all objective about myself or open to someone else's ideas. This has been a huge awakening for me. Because of learning about reflection, and learning to do it, I am now willing to listen to another person's perspective and weigh it; I'm asking others for feedback about myself ... and I can do more generalizing—I'm not so concrete about everything. I just never thought I would have this kind of flexibility.

As we shall discuss in the next section, when learning is viewed in terms of a continuum it not that far a leap to suggest that teaching must follow suit.

1.3.1: Points to Ponder (Please turn to Annex B for a discussion of these points and additional activities)

As we move toward the facilitation end of the continuum, the notion of “learner-centredness” takes on increasing importance. Reflect on your own experience as a tutor and think of an example of how you have made (or could make) your environment more learner-centred.

SECTION 1.4: FACILITATED LEARNING

What do teaching and learning look like from an andragogical perspective?

In the following sections we will look at four main approaches to facilitating learning that are currently guiding adult education. They are presented as distinct or separate types of learning, but like most things in life they overlap to some extent. Taken together, they constitute what we will call “facilitated learning.”

1.4.1: Self-Directed Learning

In the 1970’s, Knowles and other educators such as Carl Rogers were beginning to promote the idea of that education needed to move away from being a teacher-centred field in which directed learning was pervasive, towards learner-centredness or facilitated learning. Supporters of this approach suggested that education should adjust to the needs and wants of learners rather than the other way around. From their perspective, teachers need to move out of role of “sage on the stage” to that of “guide on the side” in which learning becomes more of a collaborative affair between the teacher and student. Students are encouraged to become more involved or self-directing in their learning. The notion of self-directed learning is based on a humanist philosophy, the underlying assumption of which is that education should focus on the development of the individual.
In **self-directed learning**, the goal of education becomes more about **process** (development of **critical thinking** skills, maturation as a person and citizen) than **content** (acquisition of subject-based knowledge/skills). As Barer-Stein and Draper (1988) suggest:

> This approach focused on encouraging people to explore the depths of their feelings, building self-concept, and valuing human life. The goal was to maximize human potential, building on the innate goodness of the individual, with the support of empathetic teachers as facilitators and partners in learning .... This philosophy is especially evident in adult education programs today which value learning as a process and which encourage discussion and self-discovery (p. 61).

Thus, from a humanist perspective learners are seen quite differently from the notion of “empty vessels waiting to be filled with knowledge” held by more traditional educators. Goldgrab (in Draper & Taylor, 1992, pp. 240-241) captures the essence of **humanism** in the musings of a tutor, “We see learners for what they have to give, their ideas as individuals, and for their life experience and common sense. It breaks down stereotypes of what a learner is in your mind. “

**Tips for Tutors:** Learning is facilitated when learners can assess their own learning needs and select their own learning goals and directions for change. If this is not possible, then learners should have a complete understanding of the objectives that have been established by others, should be able to accept these, and should be willing to commit themselves to the selected direction for change. (MacKeracher, 1999, p. 41)

As we shall discuss in the next section, the emphasis on personal growth has been and continues to be the subject of some debate in the field of adult education.

**1.4.2: Transformative Learning**

In the 1970's, Jack Mezirow suggested that the goal of adult educators must be to guide learners to transform; that is, literally to grow and mature intellectually and in turn, change as a person through **critical reflection** on one’s assumptions, beliefs and values. The notion that learning results in varying degrees of change is not a problem for most adult educators. That adult education should strive to directly effect change at a personal level was a significant departure from traditional education in which such change was an indirect result of learning.

In **directed learning** then, change relates more to achieving technical competencies or mastering subject matter, and less to a change in one’s perspective. In transformational learning, however, “...learners are encouraged
to challenge, defend, and explain their beliefs, to assess evidence and reasons for these beliefs; and to judge arguments" (Grabove, 1997, p. 91), the ultimate goal of which is personal growth, independence, and independent thinking. As Mezirow (1997, p. 8) writes, “the educator's responsibility is to help learners reach their objectives in such a way that they will function as more autonomous, socially responsible thinkers.”

**Tips for Tutors:** Instructors of adults can facilitate transformative learning by encouraging dialogue groups that help build relationships where tension and dissent can be explored safely. Teachers can also work to prepare themselves to teach from a transformative perspective through critical self-examination as well as sensitivity to others. (S. Scott, in Barer-Stein & Kompf, 2001 p. 245)

There has been and continues to be considerable debate among educators regarding the ethical implications of deliberately setting out to effect personal change in learners. But what if learners don't want to grow?

Lawrence Daloz, an adult educator in the United States, wrote about just such a student in “The Story of Gladys Who Refused to Grow.” Daloz acted as a mentor and academic advisor to a woman named Gladys, a woman in her 60's who had returned to college to get a diploma after raising a family and running a business for most of her life. For the most part Gladys did well and was content with her course work, but she did not deal well with any requirement to think critically about her own beliefs and values, to identify her assumptions and challenge them. Gladys just wanted to finish her program and write a book about her experiences with running a business. She was not at all interested in reflecting on the meaning of these experiences, she simply wanted to recount them. Believing his role to be going beyond simply assisting Gladys with her courses, Daloz is baffled by her unwillingness to develop her critical thinking skills. However, he then has the opportunity to meet her family and he begins to see that her life extends well beyond her education. Her unwillingness to change relates to her relationships which would be threatened if she were to “transform” or grow:

...change demands a complex kind of renegotiation of relationships among spouses, children, friends, parents, and teachers… Sometimes it is just plain simpler to stay right where they are, or at least to appear that way. That seems to be what Gladys chose to do (Daloz, p. 7).

Daloz chooses to set aside his “teacherly narcissism” and leave Gladys be although he continues to be bothered by the question of whether he actually failed her in the end.

Are our adult literacy students affected similarly by learning? As cited in Merriam and Caferella (1999), Fingeret investigated the relationships of low literacy adults and found that they developed extensive interpersonal relationships based on an
exchange of goods and services that related to the individual’s illiteracy. For example, in exchange for reading or writing something, the learner might babysit for the person helping him/her out with this. However, no longer needing to exchange babysitting for assistance with reading and writing tasks obviously changes the relationship. As Fingeret suggests, learning which decreases a learner’s dependence on others can have the unintended result of isolating the learner from important sources of support.

Most educators agree that Mezirow’s notion of transformational learning has made an important contribution to adult education by drawing attention to the benefits of fostering critical thinking skills. Whether or not personal growth should be a direct goal or an indirect consequence of learning, however, remains a bone of contention in the field.

1.4.3: Experiential Learning

In the mid 1980's, David Kolb proposed that adult learning is more effective (i.e., processed at much deeper levels) when learners are more directly involved rather passively receiving knowledge transmitted by teachers.

Kolb developed what he called the “experiential learning cycle” in which there are four distinct stages of learning. While the cycle can start at any stage, all stages are required in order for students to learn effectively:

- **Concrete Experience** - active learning as opposed to passive receipt of knowledge (i.e., learn about something directly by being involved with the material rather than learning about it)
- **Reflective Observation** – refers to thinking critically about the experience.
- **Abstract Conceptualization** – linking the experience to the theory or concepts underlying it.
- **Active Experimentation** – testing out one’s learning in new situations.

Taylor et al (2000, p. 24) offer the following example of a student who was able to transfer Kolb’s model to his employment as a police officer:

In my most recent report about traffic conditions on a local street, I not only presented the facts about the collisions and enforcement activities, but I reflected on the previous attempts to solve the problem as well as the effects of those attempts. Having the ability now to generalize about the situation and the trends in traffic safety, I was able to identify new ideas and solutions to try and use to try and increase the level of traffic safety on this street. This process also allowed me to predict possible results, thus creating a sort of method of evaluation for further analysis in the future.
Experiential learning has come to be known as “learning by doing” or “hands-on learning.” This doesn’t convey its complexity, however, in that this type of learning goes far beyond simply being more active physically. Rather, it is a matter of being more engaged in one’s learning cognitively; that is, deep level processing of knowledge/skills through experience, reflection, experimentation and application.

A key notion which experiential learning has served to highlight is of formal learning (e.g., a university course) and informal learning (e.g., everyday life), As Bouchard (in Barer-Stein & Kompf, 2001) writes, “Experiential learning challenges the misconception that learning mostly occurs in formal environments such as classrooms, and replaces it with the notion that all learning is the result of experience, no matter where it occurs” (p. 177). This is particularly relevant to adult literacy learners in that typically, they prize formal education and undervalue the informal learning gained in their day-to-day lives. For example, novice learners may place a fair degree of value on learning how to read a table in a numeracy class, but brush off their ability to find a show in the TV guide or determine which bus to take to the mall using a schedule, not realizing that the same skill set is involved.

What is helpful to our particular student population in this regard is that the value of informal learning is now being recognized by governments and the education system. In Manitoba (as in many provinces), for example, there is an office of Prior Learning Assessment and Recognition (PLAR) under the ministry of Advanced Education and Training. (Web site may be viewed at http://www.plarinmanitoba.ca/plar_main_e.html). It has a mandate is to “identify, document, assess and recognize skills and knowledge” learned informally by the province’s residents through “hobbies, family and life, military, volunteer activities, travel, independent study, and/or workplace training.” While not all adult literacy learners will need/want to avail themselves of this service (i.e., obtaining credit for informal learning), its very existence can reinforce the notion that informal learning has value. This can go a long way with regard to motivation in that many literacy students have had less than positive experiences with regard to the formal education system.
As we shall see in the following section, while experiential learning stresses that learning must be more active, **contextualized learning** proposes that it must be more **authentic**.

**1.4.4: Contextualized Learning**

The notion of **contextualized learning** suggests that learning is most effective when it is situated in the context in which it will be used. For example, rather than simply teach learners spelling guidelines, spelling would be integrated into a lesson or learning unit involving other skills/knowledge that would be used in conjunction with spelling (i.e., writing). It would be framed around realistic situations in which the skill would be used (writing a letter in which we want to make sure our spelling is accurate). As Brown, Collins and Duguid (1993, p. 1) suggest:

> Teaching from dictionaries assumes that definitions and exemplary sentences are self-contained “pieces” of knowledge. But words and sentences are not islands, entire unto themselves.... Experienced readers implicitly understand that words are situated. They, therefore, ask for the rest of the sentence or the context before committing themselves to an interpretation of a word. And then go to dictionaries with situated examples of usage in mind.

**Contextualized learning** on the other hand, does not make this assumption and in fact, suggests that context is essential to students’ understanding of when to apply knowledge/skills.

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**Tips for Tutors:** Teach skills in multiple contexts - Don’t just do proofreading worksheets out of a textbook; have students proofread menus, newspaper articles, their own and each other's writing, and so on. Every time you teach a skill, have students practice it in many different settings. (Cromley, 2000, p. 210)
Thus, as in experiential learning the goal of contextualized learning is deep level processing which goes well beyond the simple acquisition of knowledge/skills to understanding and applying knowledge/skills across various contexts.

1.4.5: Points to Ponder (Please turn to Annex B for a discussion of these points and additional activities)

A) How might a family literacy learning unit on positive discipline proceed through the four stages of Kolb’s experiential learning cycle?

B) A fictional example similar to Lawrence Daloz’s experience with Gladys is offered by Merriam and Caferella (1999, p. 383):

In the movie “Educating Rita,” the protagonist enrolls in an open university course and is introduced to a world very different from the one she has inhabited all her life. Midway through her transformation from a working-class London hairdresser to an articulate student of great literature, Rita is invited to a party at her professor’s home. In a particularly poignant scene, she stands outside the house afraid to go in. Instead, she joins her husband and parents in a tavern where they are singing and drinking. She sits with them, but remains separated from the activity. The next day she tells her professor that she can no longer relate to her family’s world, but she is not comfortable in his world either. She is clearly in a great deal of pain

Merriam and Caferella go on to ask:

Most educators believe in the “goodness” of continued learning—that more is better than less, that through education both individuals and society can advance to higher levels of development. But what of the unintended outcomes of learning…? What responsibility do we have for the pain and discomfort of our learners as well as their growth and successes (p. 383)?
What is your opinion? Should personal maturation/change be a direct goal of education as transformational learning would suggest? Why or why not?

C) What responsibilities would an educator who is adhering to a humanist philosophy have toward teaching and learning? Reflect on your own tutoring and experiences as a student. Have you exhibited and/or experienced a humanistic approach? Did it help and/or hinder the effectiveness of learning? How so?

SECTION 1.5: CONCLUSION

Following its proposal in 1970’s by Malcolm Knowles, many adult educators rushed to embrace the notion of andragogy or facilitated learning, pushing pedagogy or directed learning to the scrap heap of outmoded approaches to education. As touched on in this first module, however, there has more recently been growing recognition that both andragogy and pedagogy have their place in education. Moreover, rather than being viewed as two separate approaches, they are more effectively used as a teaching-learning continuum, a well-stocked “toolbox” if you will for dealing with the complex and fluid nature of learning. That said, the love affair with andragogy has served education well in that it has underscored the benefits of dealing with learners of all ages in a more humanistic manner than was the case in the past.

The next module will turn to more practical (versus theoretical) considerations for working with adult learners, while the third and final module will return to the notion of a teaching-learning continuum.
SECTION 1.6: QUIZ

Please turn to Annex A for the answers to the quizzes.

1. Transformational learning refers to:
   a. learning skills/knowledge in the context in which they will be used
   b. learning that is very active or hands-on
   c. learning that involves a degree of personal maturation or growth
   d. all of the above
   e. none of the above

2. A pedagogical approach to learning:
   a. is also referred to as “directed learning”
   b. involves a teacher-centred learning environment
   c. emphasizes mainly surface level processing of material
   d. all of the above
   e. none of the above

3. Kolb’s learning cycle:
   a. involves four stages including concrete experience, reflective observation, abstract conceptualization, active experimentation
   b. can start in any stage, but the learner must go through all four stages in order for learning to be effective
   c. emphasizes both active learning and critical thinking
   d. all of the above
   e. none of the above

4. Self-directed learning is associated with:
   a. behaviourism
   b. humanism
   c. liberalism
   d. all of the above
   e. none of the above

5. An andragogical approach to teaching:
   a. emphasizes self-directed learning
   b. is also referred to as facilitated learning
   c. stresses mid to deep level processing of material
   d. all of the above
   e. none of the above
6. Learning can best be described as:

   a. the simple acquisition of skills/knowledge
   b. the intellectual, physical and/or affective processing of knowledge/skills to various degrees
   c. much different in the case of adults in comparison to children’s learning
   d. all of the above
   e. none of the above

7. The teaching-learning continuum:

   a. is underpinned by several different philosophies of education
   b. ranges from pedagogy or directed learning at one end, to andragogy or facilitated learning at the other
   c. represents a “toolbox” of sorts that educators can use in their teaching
   d. all of the above
   e. none of the above

8. Facilitated learning:

   a. is referred to as the “sage on the stage” approach
   b. refers to a teacher-centred learning environment
   c. emphasizes mastery of standardized curriculum
   d. all of the above
   e. none of the above
SECTION 2.1: INTRODUCTION

In Module 1 we looked at some of the theory currently guiding an andragogical or facilitated approach to teaching and learning. In this second module we will discuss a number of factors that influence the practice of teaching and learning with adults.
SECTION 2.2: THE ADULT LEARNER

As learners, are adults different than children?

2.2.1: Characteristics

As discussed in Module 1, when the concept of facilitated learning was first proposed by Malcolm Knowles in the 1970’s, he differentiated it from directed learning as “the art and science of teaching adults.” As Kerka (2002) suggests (and the table below summarizes), the assumptions underlying adult learning theory (left-hand column) were not entirely supported in practice (right-hand column), “Andragogy has been criticized for characterizing adults as we expect them to be rather than as they really are. Both andragogical and pedagogical models assume a generic adult and child learner.”

<table>
<thead>
<tr>
<th>Theory</th>
<th>Practice</th>
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<tr>
<td>As people mature over the lifespan they move from being dependent on others toward being self-directed and independent. Thus, adult learners will flourish in an environment that is more learner-centred. Children, on the other hand, are developmentally immature and therefore, require a teacher-centred environment.</td>
<td>Adult learners may be quite dependent and unwilling to take responsibility for their learning. Some individuals only grow or mature to a certain degree and then can’t or won’t go any further (e.g., the story of Gladys). As learners, many children are quite willing and able to be more self-directed and independent.</td>
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<tr>
<td>As individuals mature, they typically gather a wealth of experiences that can be used as resources for learning. That is, learning material can be applied in a variety of ways to multiple situations depending on the experiences of the group, and as such is more deeply processed.</td>
<td>Again, this is true in a general sense. Adults have lived longer than children and so typically have done much more. However, there are many adults who have done very little in their lives, just as there are children who have done a lot and can bring a wealth of experience to their learning.</td>
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<tr>
<td>Adults are more internally motivated to learn than children (i.e., they need/want external motivators such as competition and grades less than children). This has the advantage of freeing up more of an educator’s time and resources from supervisory and motivational tasks.</td>
<td>There are many learning situations and adult learners in which and for whom external motivators are vital to promote and maintain interest. By the same token, children are motivated by things other than grades or competition (external), such as satisfaction and enjoyment of learning for the sake of learning (internal).</td>
</tr>
<tr>
<td>Learning that relates in direct ways to life roles (i.e., spouse, parent, community member, employee) is especially motivating</td>
<td>As any K-12 educator will tell you nowadays, learning that is meaningful is more interesting to children too. The themes</td>
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to adult learners. That is, concrete knowledge/skills that can be applied directly/immediately in one’s life holds greater meaning/attraction than more abstract information.

might be different (adult learning might focus on practical themes such as banking or home management whereas for children the focus would be on their everyday lives such as the weather, holidays, nature, etc.), but the underlying assumption is the same. Learning is much more effective when it is meaningful to learners of any ages.

In short, **facilitated learning** was more about how educators thought adults *should be* than how adults actually are; that is, not all adults are created equal. As such, when reading through the large amount of literature that is available regarding adult learning, it is crucial to understand that this is more about learning in which knowledge/skill building ranges from the simple to the complex, and from dependent and passive learning to independence and active involvement. As Merriam (2001) writes, “Knowles himself came to concur that andragogy is less a theory of adult learning than a model of assumptions about learning or a conceptual framework that serves as a basis for an emergent theory” (p. 5).

**Tips for Tutors:** Adults will learn best:
- When others respect and acknowledge them and their past experiences and personal knowledge, skills, values, and motives (that is, their personal model of reality).
- When they are treated in ways which are consistent with their existing description of who they are and what they are capable of doing.
- When their learning bears some relationship to past experience and can be connected to their existing meanings and personal model of reality.
- When they have some sense of where they are going in the learning process, how they will get there, and how they will know when they have succeeded. (MacKeracher, 1999, p. 28)

### 2.2.2: Intellectual Development

One of the factors that that influence the decision about where on the teaching-continuum to be positioned is the learner’s level of **intellectual development**. In 1970, William Perry proposed a useful model for capturing the development or maturation of our thinking abilities. It included three general stages as follows:
• *Stage 1: Dualism or Received Knowledge* refers to a belief that knowledge is absolute and attainable, that there are right and wrong answers, that “the truth is out there.” Learners believe that teachers will pass these truths along to them, and that their role as student is to learn all the “right” answers. Students at this stage prefer material that is black and white, and often become confused or frustrated when asked to deal with shades of gray.

![Image of a teacher at an information desk]

• *Stage 2: Multiplicity/Subjective Knowledge* refers to an acceptance by learners that there are multiple "truths" available versus one right answer. While learners accept this, they do not fully comprehend the underlying argument of these “truths” and cannot judge their merits well if at all. The teacher is viewed as being in possession of these multiple truths and responsible for guiding students to them.

![Image of a teacher with a pointer]
Stage 3: Relativism/Procedural Knowledge involves an acceptance on the part of the learner that knowledge is relative and situational. That is, each individual constructs his/her knowledge based on experience and reflection, facilitated by the teacher in greater or lesser degrees based on the needs/wants of the learner and the educational objectives. The learner’s role is to critically reflect on multiple perspectives and determine the most suitable answer in a particular situation.

When framed against the teaching-learning continuum, we can see that dualism or Stage 1 thinking would be at the same end as pedagogy (i.e., in that directed thinking emphasizes technical competencies, mastery of subject matter). At the opposite end would be Stage 3 or relativistic thinking in which the emphasis is on critical thinking. And, Stage 2 thinking would be in the middle.

Tips for Tutors: ...a comfort match for dualistic thinkers would be a facilitating style presenting knowledge as absolute truth, probably through lecturing. A developmental match for multiplistic thinkers would be a facilitating style encouraging and supporting individualistic thinking, probably through discussions. Adults may need assistance in learning skills typifying the post-formal [relativistic] stage of cognitive development such as; finding and formulating problems; asking questions; recognizing instances in which transfer of knowledge or skills can occur; developing projective images of future possibilities and working toward them; dealing with uncertainties, ambiguities and doubts; thinking critically; reflecting on action; and learning to learn (MacKeracher, 1996, p. 121).
It is fairly self-evident that our teaching approach (i.e., where we are on the teaching-learning continuum) must match where our learners are at in terms of their **intellectual development**. Asking a Stage 1 learner to learn at a Stage 3 level would very likely be frustrating for all concerned just as would asking a Stage 3 learner to learn at a Stage 1 level.

One reason that **andragogy** has become known as “adult learning” is that in general adults do tend to be further along than children in terms of their intellectual development, or at least more capable of being so. That said, there are many adults who do not progress past Stage 1 or 2 as we saw in the story of Gladys. As with teaching and learning, it is more accurate to view intellectual development as a continuum. Most children and some adults will be at far end where thinking is at a Stage 1 level, whereas most adults and some children will be at or beyond Stage 2. The important point to keep in mind is that one of the factors that influences how we approach teaching and learning with adults (i.e., directed to facilitated) is the stage at which each individual student is in terms of intellectual development.

### 2.2.3: Motivation and Participation

**What factors influence the participation and motivation of adult learners?**

**Tips for Tutors:** Material that is interesting and/or useful to adult learners will be more motivating.

> Adult students’ reading comprehension over the term improves more when they read about topics they are interested in (such as career interests or health topics) than students who read about “general” topics. Students also have better comprehension because they have more background knowledge (including vocabulary). Adults who read about topics they are interested in also read more, which makes them better readers (*Cromley, 2000, p. 173*).
It is common in the literature on adult learning theory to characterize adults as voluntary learners and children as a captive audience for educators. As any workplace literacy tutor who has stood in front of a class of students forced to be there as a condition of employment can tell you, not all adult learning situations involve students who participate willingly and/or happily. Thus, one factor that greatly influences the adult learner is *whether the learning is voluntary or involuntary*. When adults are directed to take a course, it is a fairly simple matter to understand the issues of motivation and participation. What is less clear are the factors that influence adult learning in voluntary situations.

Voluntary Learning  
Involuntary Learning

In 1963, Howard McClusky introduced his “Theory of Margin” which has remained popular because of its simple framework for gauging the changing effect of a multitude of factors on adult participation. It provides adult educators with a way of understanding the reasons why participation waxes and wanes as it tends to in adult learning, especially in areas such as adult literacy. As pictured below, McClusky used the relatively simple formula “Power” divided by “Load” equals “Margin” to depict the fluid nature of participation/motivation:
• **Load** refers to internal and external factors that influence how much time and effort adult students can devote to their learning. **Internal** factors relate to one’s inner emotional/psychological life such as self-concept, goals, and personal expectations. **External** factors include the learner’s roles and responsibilities in daily life related to family, employment, and community.

• **Power** like load, consists of both internal and external factors which relate to the amount of resources a student has available for learning. **Internal** resources include the physical (e.g., general health, fitness, stamina), the emotional/psychological (e.g., personality type, organizational skills, interpersonal skills); the cognitive (e.g., ability to think, reason, problem-solve); and available skills and knowledge (i.e., what the individual can do/knows before entering the learning environment). **External** factors include the learner’s socio-economic status (e.g., financial, status in community, amount of power and influence, support from family and friends)

• **Margin** refers to the overall resources that an adult has available to participate in learning at any given point in time.

It is fairly clear that this model is better suited to an environment that is **learner-centred** rather than **teacher-centred** in that it requires a more intimate relationship between teacher and student. As such, it is well-suited to adult literacy in that most programs in the field do tend to be learner-centred. It is often the case that adult literacy learners’ margins are limited given the load to power ratio in their lives. That is, low levels of literacy are very much tied to low socio-economic status and this translates into low power and high load (e.g., poverty, low self-esteem and limited self-worth, negative attitudes towards education, poor health, and so on).

The success of McClusky’s model is due to the fact that it captures the fluidity and complexity of adult participation in learning in a fairly straightforward and easy to conceptualize manner. It provides a mental framework for “sizing up” and keeping track of students’ ability to persist given the myriad of factors that influence their lives.

### 2.2.4: Learning Styles and Multiple Intelligences

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<th>Do individual students learn differently?</th>
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Another factor that influences the teaching and learning of adults is the **preferred learning style** of students. Adult education literature has many different learning style inventories which grew in popularity as **facilitated learning** shifted the focus away from **teacher-centredness** and onto the learner. A **learner-centred approach** meant that educators adjusted to the needs/wants of their students rather than other way around, and it quickly became evident that not all students learn in the same way. As a result, a multitude of learning style inventories were
developed in the decades following the rise of andragogy. These can be loosely grouped as follows:

- **Physical Learning Style Inventories** emphasize the preferred use of a particular sense when learning; sight, hearing or touch/movement. For example, people who feel most comfortable when they are listening to information can be described as having an auditory learning style. A visual learner, on the other hand, would prefer to read information. The point is that most adults have a strong preference for one sense over another with regard to taking in and processing information.

- **Cognitive Inventories** are used to assess a learner’s preferred way of thinking based on various aspects of the cognitive domain. As Brundage and MacKeracher (1980, p. 25) suggest, “Adults have already developed organized ways of focusing on, taking in and processing information. These are referred to as cognitive style and are assumed to remain relatively constant and consistent throughout adulthood.” One example of a cognitive inventory that is particularly relevant to the notion of a teaching-learning continuum is Gregorc’s Style Delineator. Learners are assessed along two intersecting continua; concrete to abstract thinking, and sequential to random thinking. There are four possible styles of thinking; concrete sequential (CS), abstract sequential (AS), concrete random (CR), and abstract random (AR), which can be described as follows:
  
  - **CS** learners need a structured approach to learning. Specific schedules and stated course requirements will be important to them. Clear expectations of performance are needed and they will appreciate a step-by-step approach to learning with continual validation along the way.
  
  - **AS** learners work best independently. They are able to formulate theory, and are excel at doing research and learning from books. Structured learning is helpful, but these learners do not depend on direction and reinforcement from an instructor to the extent that concrete sequential learners do. They are especially suited to academic environments and often succeed exceptionally well at university.
  
  - **CR** learners need concrete experiences to reinforce their learning. They are divergent thinkers; that is, they excel at brainstorming, problem-solving and being innovative. Experiential or “hands-on” learning is essential for them to grasp ideas and formulate opinions. These learners can work equally well in groups or on their own. They prefer choice and encouragement to solve problems independently. These learners are often least accommodated in
educational institutions since they need open-ended and experiential learning experiences.

- **AR** learners work best in groups. Clarifying their thinking through discussion with others is the way they learn best. They enjoy interacting with others and will often work hard to obtain an instructor's approval. Relationships are crucial to effective learning for these learners. Academically, they may struggle without some positive encouragement from and interaction with their instructor(s).

Gregorc's inventory is helpful in identifying where learners might fare best along the continuum. For example, a learner who is strongly CS will experience problems towards the **facilitated learning** end of the continuum, while a student who is a CR learner will have difficulty towards the **directed learning** end of the continuum. There are many cognitive inventories, but two others that are widely used include the Kolb Learning Style Inventory and the Kiersey Temperament Sorter.

**Tips for Tutors:** In discussing learning styles with learners, facilitators should discuss the strengths and weaknesses of all styles. They should avoid the constant use of their own learning styles as the starting point for facilitating activities and definitely avoid any implication that a specific learning style is inadequate (MacKeracher, 1996, p. 205).

Most learning style inventories have been criticized for focusing on one domain over another. Recently, however, one particular inventory has gained popularity because it nicely integrates three; the **cognitive domain**, the **physical domain** and the **affective domain**. Howard Gardner's multiple intelligences inventory assesses seven different types of intelligence which span the three domains. The "intelligences" include:

- **Verbal/Linguistic** – the ability to effectively manipulate language to express oneself rhetorically or poetically. It also allows one to use language as a means to remember information.
• **Logical/Mathematical** - the ability to detect patterns, reason deductively and think logically

• **Visual/Spatial** - the ability to manipulate and create mental images in order to solve problems

• **Music/Rhythmic** - the capability to recognize and compose musical pitches, tones, and rhythms

• **Body/Kinesthetic** - the ability to use one's mental abilities to coordinate one's own bodily movements
Interpersonal - the ability to understand the feelings and intentions of others

Intrapersonal - the ability to understand one's own feelings and motivations

Gardner contends that in order for learning to be effective, all of the intelligences must be addressed in teaching. While it may be difficult to do so in every situation, educators need to be aware of the three domains (i.e., physical, cognitive and affective), and as much as possible plan learning activities that address these. The intelligences provide a “checklist” if you will, of the types of areas that should be addressed in order to ensure learning is effective.

2.2.5: Points to Ponder (Please see Annex B for a discussion of these points and additional activities).

A) How might you incorporate physical learning styles into an activity that focuses on assisting a group of learners with improving their spelling?

B) Reflect on your own experiences as an adult literacy tutor for a moment. What have your students been like in terms of their motivation; their desire to be self-directed/independent in their learning, and their ability to clearly identify their goals with regard to improving their literacy?

C) What might you/your program do to decrease learners’ load and increase “power”?
D) According to adult learning theory, why would you try to move a student who is exhibiting “dualistic thinking” into more “multiplistic” thinking?

SECTION 2.3: THE ADULT EDUCATOR

How do teaching style and underlying educational philosophy influence learning? Do the beliefs and values of the educator influence learning?

2.3.1 Underlying Philosophy of Education

Zinn (1991) suggests that adult educators teach according to educational philosophies which:

...are fairly deeply held, closely aligned with people’s life values, and unlikely to change significantly. Teaching techniques or teaching style, however, may vary depending on what works best in a particular situation, as long as the techniques used are not incompatible with a teacher’s philosophy of education (p. 6).

Zinn developed the Philosophy of Adult Education Inventory (PAEI) in which she identified five main educational philosophies. The philosophies and their central purposes include:

- **Liberalism** - emphasizes the development of the intellect through mastery of content. As the subject matter expert, the teacher’s role is to impart knowledge.

- **Behaviourism** – stresses behavioural change in the learner. The role of the teacher is to initiate and shape (direct) this behavioural change.

- **Progressivism** – focuses on an experiential, problem-solving approach to learning. Prior experience plays an important role in learning. Learning is characterized by the student’s active involvement in determining problems, objectives and outcomes. The teacher’s role is to facilitate rather than direct learning.

- **Humanism** - personal growth and development are stressed in this philosophy, as is self-directness on the part of learners. Teachers serve as facilitators and guide learning processes, find resources, and remove barriers to learning.

- **Radicalism** – seeks to bring about fundamental, social, political, and/or economic change through education.
Generally, Zinn suggests, educators will have one or perhaps two dominant philosophies. What is important for adult educators to recognize is that a mismatch between teaching philosophy and educational objectives can be a significant barrier to learning. For example, if an educator holds a strong humanist or progressive philosophy of education, s/he will not be comfortable in a highly pedagogical environment, nor will his/her preferred techniques suit the educational objectives. S/he might be able to use directed learning techniques when the situation calls for it, but to teach fully this way on an ongoing basis would be difficult if not impossible.

Thus, it is important for adult literacy tutors to know what their underlying educational philosophy is and how this influences their teaching. For example, the choice of what type of literacy program to work with will be influenced by philosophy in that they range from highly structured and directed (e.g., adult learning centers/ABE programs), to very informal, one-on-one tutoring in general programs.

You may download a copy of the PAEI or try the inventory online from the following site:

http://www25.brinkster.com/educ605/paei_login.htm

Please note that you must have a browser that supports VBScript and JavaScript (i.e., Netscape Navigator or Internet Explorer 4 or higher). You will need to register as "Guest" when you go to this site. Just click on the "Register" button beside "New Visitor?" and follow the directions. Once you have registered, you will arrive at a welcome screen. Just click on "Take PAEI" and complete the questionnaire. You will automatically be given your results at the end.

2.3.2: Points to Ponder (Please see Annex B for a discussion of this point and additional activities).

Is it important to reflect on your philosophy of education? Why or why not?
SECTION 2.4: CURRICULUM

What are we referring to when we use the term “curriculum”?

When discussing curriculum, it is important first to clarify the term in that there is a lack of clarity in curriculum-related terminology. As Miller & Seller (1990) suggest:

At one end, curriculum is seen merely as a course of study; at the other end, curriculum is more broadly defined as everything that occurs under the auspices of the [educational organization]. In the middle of the spectrum, curriculum is viewed as an interaction between students and teachers that is designed to achieve specific educational goals (p. 3).

In the case of this particular course, the term "curriculum" will be used in a fairly narrow manner to denote the content and process of learning.

2.4.1: Content

In terms of the content involved in the field of adult literacy, it is apparent from the variety of programs available that the needs of learners are diverse. Programs can be loosely grouped into those which are general in focus, and those which are more specialized (e.g., family literacy, workplace literacy, ESL). Typically, general programs are open to any adult and focus mainly on improving core literacy skills (i.e., reading, writing, spelling, numeracy and computer). For example, Frontier College is a Canada-wide, volunteer-based, literacy organization that teaches "anyone, anywhere." In contrast, specialized programs are generally directed at a particular group and have a more specific focus. Some examples include:

Family literacy programs offer literacy instruction for the whole family versus adults only. Parenting education and training is offered in addition to literacy instruction.
Workplace literacy programs offer literacy geared toward employment. In some cases the program will be situated at an employer’s site and will focus both on general literacy instruction (e.g., reading skills), as well as specific literacy skills related to the business (e.g., reading technical manuals).

Academic upgrading programs are geared toward preparing learners for adult high school (often referred to as Adult Basic Education [ABE]), or a General Education Development [GED] diploma program.

Aboriginal literacy programs are specifically geared to address the different learning styles, experiences and preferences of Native learners.

Life skills & literacy programs offer a combination of life skills and literacy instruction for specific at-risk populations such as inmates in federal/provincial corrections facilities. Another example would be family literacy programs in which parenting classes are offered in conjunction with literacy instruction.
English as a Second Language (ESL) & literacy programs - although learners in these programs most often have moderate to high literacy levels in their primary language, they are not as competent in English. Thus, these programs necessarily combine literacy and language instruction.

In short, all adult literacy programs include what can be termed “core curriculum” (i.e. foundational knowledge/skills including, reading, writing, spelling, numeracy, communication and the computer. In specialized programs, however, there is an added layer of material to be learned such as parenting or workplace skills/knowledge. These layers can be loosely grouped into subject-based curriculum and theme-based curriculum.

Subject-based curriculum involves standardized material that is closely tied to our public school system curriculum. That is, skills/knowledge are grouped according to subject areas (e.g., mathematics, language arts), and divided into chunks or units that are taught in a linear or sequential fashion. In adult literacy, programs that use this approach are often referred to as “Adult Basic Education” (ABE) programs, the mandate of which is to bring learners up to an academic level where they can undertake adult high school or a General Education Diploma (GED) program. Due to the standardized and structured nature of the material to be learned, the approach typically adopted is toward the directed end of the teaching-learning continuum.

**Tips for Tutors:** Textbooks are good as resources, but should not substitute for authentic and active learning activities. Textbooks tend to focus on one subject and transmit material in a sequential manner that does not reflect the somewhat ‘messy’ way we acquire, process and use information in real life. The problem with learning literacy skills/knowledge in isolation is that a great deal of context is lost and the material is much more abstract. This makes it difficult for learners to remember what has been learned, as well as to generalize what is learned to a variety of situations. Theme-based learning activities connect knowledge/skills to “real life.”

Theme-based curriculum, on the other hand, involves framing material around topics related to learners’ immediate needs and/or wants (e.g., to improve one’s parenting skills/knowledge, to learn a second language, to couch literacy skills/knowledge in culturally relevant terms). As Dirkx & Prenger (1997) suggest, "Literacy educators have long recognized that relating instructional content to the specific contexts of learners' lives and interests increases motivation to learn" (p. xii). Core skills/knowledge are typically integrated into the overarching “theme.” In specialized programs this would involve one particular focus such as parenting or
the workplace. In general programs, theme-based curriculum tends to focus on daily living activities and roles such as personal finances or healthy living.

For example, a Canadian adult literacy program in Manitoba developed theme-based curriculum entitled *Bridging the Gap*, in which the use of computers is integrated into workplace literacy. In 1999, the state of Massachusetts developed curriculum framed around the purchase of a home that included information about:

… the availability of loans and subsidy programs for low income buyers, the process of buying and maintaining a condominium or two- or three-family home, the steps involved in documenting a non-traditional credit history, the issues and responsibilities embedded within tenant/landlord relations and the various resources and supports available from neighborhood and regional government housing programs.

In both cases, core skills/knowledge are used as they would be in real life or in context. The theory underlying theme-based curriculum is that putting knowledge/skills into context rather than teaching them in isolated chunks adds meaning to learning. (See Section 1.4.4 Contextualized Learning). This makes the material more interesting and motivating, and thereby easier to process to a deeper level.

Implicit in the notion of theme-based learning is the notion that the themes used should focus on learners' needs and/or wants (i.e., a learner-centred environment), and emphasize understanding and application (i.e., problem-solving) of knowledge/skills over mastery of content. As such, the mid to upper range of the teaching-learning continuum is the most appropriate position when utilizing theme-based curriculum.
As a note of interest, while public education has traditionally been organized around subject-based curricula, some of the benefits of andragogical learning theory have spilled over into this area of education as well. Over the last decade there has been growing recognition that learning is also more effective for children when it takes place in context. Thus, **theme-based learning** is also becoming popular in K-12 education. The themes chosen are based on children’s interests and abilities at various stages of development. As educators recognize the value of integrating skills and knowledge and tying learning to the real world, the line between subject- and theme- based curricula is becoming blurred.

2.4.2: Process

The importance of using theme-based materials relates very much to the **process of learning** effectively. That is, because it is **meaningful**, it enhances learners’ ability to take in, process and retrieve information from memory; frame and solve problems; and comprehend, communicate and apply knowledge/skills. This is crucial in that our definition of what it means to be “literate” has stretched well beyond one’s ability to simply read, write and/or spell. The popularity of technology, particularly computers, has placed increasing demand on individuals to be **information literate**. At the core of being literate in today’s world (at least in most first world countries), is the ability to deal with information in all the various aspects of our everyday lives.

> The level of literacy required to function in everyday life is constantly shifting upward.... The key policy question is how to help all citizens to develop, maintain and continuously advance their literacy skills in order to live and learn in a knowledge-based and information-intensive society (Literacy for Tomorrow, 1999, p.14).

That is, being literate refers to the ability to locate, understand, evaluate, utilize, and convey information at home, at work, and in the community.

In an earlier section, we discussed Perry’s model of **intellectual development**; that is, Stage 1 (**dualism**), Stage 2 (**multiplicity**), and Stage 3 (**relativism**). We also discussed the issue of whether or not we should assist learners to mature intellectually (and vis a vis, personally). What we have not touched on yet, however, is how we might go about helping learners to develop intellectually.
Bloom’s (1956) taxonomy of educational objectives is very useful for adult educators in this regard. As the taxonomy below suggests, Bloom believed that the educational objectives of learning range from surface level processing or rote learning in which we simply acquire knowledge/skills, through to deep level processing or critical thinking. The value of Bloom’s taxonomy is that it provides us with the type of learning activities we will need to engage in with our students in order to promote different levels of thinking across the continuum.

<table>
<thead>
<tr>
<th>Objective</th>
<th>“Learning” involves...</th>
<th>At this level we would ask learners to...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>...simple acquisition of knowledge/skills without a deeper understanding or comprehension of either</td>
<td>...list, define, tell, describe, identify, show, label, collect, examine, tabulate, quote, name, who, when, where...</td>
</tr>
<tr>
<td>Comprehension</td>
<td>... understanding the knowledge/skill being learned</td>
<td>...summarize, describe, interpret, contrast, predict, associate, distinguish, estimate, differentiate, discuss, and/or extend...</td>
</tr>
<tr>
<td>Application</td>
<td>...using the knowledge/skills a variety of situations ...</td>
<td>...apply, demonstrate, calculate, complete, illustrate, show, solve, examine, modify, relate, change, classify, experiment, discover...</td>
</tr>
<tr>
<td>Analysis</td>
<td>... breaking knowledge/skills down into component parts, making inferences, developing conclusions</td>
<td>...analyze, separate, order, explain, connect, classify, arrange, divide, compare, select, explain, infer...</td>
</tr>
<tr>
<td>Synthesis</td>
<td>Rearranging knowledge/skills to form new knowledge/skills, identifying patterns, integrating skills/knowledge from a variety of areas</td>
<td>...adapt, combine, integrate, modify, rearrange, substitute, plan, revise, create, design, invent, answer “what if?” questions, compose, formulate, prepare, generalize, rewrite...</td>
</tr>
<tr>
<td>Evaluation</td>
<td>...assessing the value of theories, presenting a reasoned argument, taking a decision based on the value of the evidence ...</td>
<td>...convince, critique, explain, assess, decide, rank, defend, justify, measure, appraise, recommend, select, judge, discriminate, support, conclude, compare ...</td>
</tr>
</tbody>
</table>

It should be noted that although we have discussed “content” and “process” in two distinct sections above, in reality they are intertwined and cannot be quite so neatly separated.

### 2.4.3: Points to Ponder

(Please see Annex B for a discussion of this point and additional activities).

Reflect on your own learning experiences as a student. Where you able to transfer the knowledge/skills you learned to various “real life” situations? Why or why not?

### 2.5: The Learning Environment

| What aspects of the learning environment influence learning? |

#### 2.5.1. The Affective Domain

As we touched on in the section regarding **learning styles**, the affective domain relates to how individuals feel **emotionally** and **physically** while learning. This includes both internal and external factors as follows:

- **Internal factors**
  - **physical** - hunger, thirst, fatigue, and illness
  - **psychological** - willingness to take risks, persistence and attention abilities; attitudes, beliefs, and assumptions

- **External factors**
  - **physical** - comfort concerns such as temperature, noise and light levels, amount and type of distractions
o **psychological** - personal style of others, stressful situations at work or home, support from others.

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**Pedagogy** has given us a great deal of information regarding the physical factors that need to be accommodated in the classroom. We are well aware of the need to create a learning environment that is comfortable for learning (e.g., ensuring that sufficient and timely breaks for rest, food and/or drinks, or to visit the washroom are provided, that the classroom is not too hot/cold, too noisy or distracting, has sufficient light). Pedagogy, however, has not been quite so informative about how to deal with the psychological needs/wants of adult learners. Rather, it is to **andragogy** that many educators turn for answers in this regard.

<table>
<thead>
<tr>
<th><strong>Tips for Tutors:</strong> Adults learn best...</th>
</tr>
</thead>
<tbody>
<tr>
<td>o when they are in good health, are well rested, and are not under stress... Adults do not learn productively when under severe time constraints. They learn best when they can set their own pace and when time pressures are kept to a minimum (Brundage &amp; MacKeracher, 1980. p. 23).</td>
</tr>
<tr>
<td>o in environments which provide trusting relationships, opportunities for interactions with both the teacher and other learners, and support and safety for testing new behaviours (Brundage &amp; MacKeracher, 1980. p. 26).</td>
</tr>
</tbody>
</table>

The **humanistic philosophy** underpinning **facilitated learning** has left a mark on education in general. It has emphasized the need for treating all learners with more dignity and respect. Even in environments involving very **directed learning** such as the military or working with children, educators are much more sensitive to not over-stepping their bounds or abusing their authority. As will be discussed in the next section, from **humanism** and this movement toward “**learner-centredness**” has developed the practice of **inclusive learning environments**.
2.5.2 Inclusive Learning Environments

Inclusive learning environments are based on the notion that the educator must adjust the learning environment so that all learners can thrive. It is an acknowledgement “that all individuals bring multiple perspectives to any learning situation as a result of their gender, ethnicity, class, age, sexuality, and/or physical abilities” (Imel, 1995). Unfortunately, space does not permit a detailed examination of all of these factors. By way of example, however, one factor that is especially prevalent in adult literacy classrooms and demonstrates the concept of inclusiveness is multicultural diversity. Barer-Stein (Barer-Stein & Draper, 1991) provides several suggestions for respecting cultural differences and creating an inclusive learning environment:

- Be critical of class resource materials and persons:
  - Do they represent varied points of view?
  - Do they avoid offending minority groups?
  - Are they accurate, well qualified and current?

- Take care not to favour one culture over another.

- Be alert to cultural slurs.

- Be open to incorporating several views of a discussion topic by making use of the differing views and backgrounds within the classroom.

- Take the time for clarification and examples, especially when there seems to be evidence of prejudice, discrimination, or stereotyping.

- Encourage individual questions and contributions relating to cultural background. For example, after an explanation of a skill or metaphor, encourage the offering of differing skills and differing metaphors from other cultural contexts.

- Be aware of differing language abilities in English and take care to speak loud enough as well as distinctly. Use examples whenever possible and encourage feedback to
determine when further repetition or a better example may be required. Often simply speaking more slowly can be of great help.

- Be alert to a different structuring of daily life. For example, there may be initial misunderstanding of punctuality and deadlines. It may be important not to insist on male-female mixed groups for projects or discussions: allow people to form their own groups, find their own seating. Respect those involved in differing holidays, eating restrictions, wearing unusual apparel or even stepping aside to perform prayers during class time.

- Replace mere tolerance with serious and continued efforts to understand and accept the reality of differing values and perceptions.

2.5.3: Points to Ponder (Please see Annex B for a discussion of this point and additional activities).

Are there any dangers in being “culturally sensitive” in our teaching? Please explain.

SECTION 2.6: ORGANIZATIONAL FACTORS

We’re in charge in the classroom, aren’t we?

No discussion about factors which influence learning would be complete without some acknowledgement that there are influences on learning beyond those found directly in the classroom. These can be loosely grouped into two general types; institutional/societal and resources.

- Institutional/societal pressures include:
  - the mandate/policies of the program we are teaching with
• government policy/political climate

• community support

For example, a tutor may wish to use a facilitated approach, but the program s/he works for, the government (from which our funding comes) and/or the community (taxpayers) in which the program is located may believe that the only worthwhile educational endeavour is a directed approach in which outcomes are directly measured and graded. This was the case in Ontario during the latter part in the 1990’s when the Harris government required that the adult literacy community in that province adopt an outcomes-based approach.

• Resources relate to the various things we require in teaching and learning. For example, we may wish to adopt a more facilitated approach in our literacy program, but don’t have access to practitioners who are experienced in teaching in this manner. We may have a group of learners who come to class expecting that we will teach using a directed approach, and become unhappy when a more facilitated approach is used (i.e., in the sense that willingness and good will are “resources” with regard to learning). We may want to incorporate experiential learning into our teaching, but lack the finances to arrange for more “hands-on” activities.
2.6.1: Points to Ponder (Please see Annex B for a discussion of this point and additional activities).

Why do you suppose it is the case that many tutors are concerned about the degree of involvement by government in the field of adult literacy?

SECTION 2.7: CONCLUSION

In this module we have looked at a number of factors that can influence learning including the adult learner, the adult educator, the curriculum and the learning environment. In the third and final module, we will return to the issue of the teaching-learning continuum and how theory and practice can be blended together in adult literacy tutoring.
SECTION 2.8: QUIZ

Circle one answer for each question:

1. McClusky’s notion of “margin” refers to:
   a. internal and external factors that take away from the resources a student has to participate in learning
   b. internal and external factors that add to the resources a student has in order to participate in learning
   c. is the amount of resources a student has available for learning at any given point in time once power and load are taken into account
   d. all of the above
   e. none of the above

2. In Bloom’s taxonomy of educational objectives, “application” can best be described as questions asking learners to:
   a. judge, assess, revise, measure, recommend, criticize, evaluate, determine
   b. translate, report, describe, retell, explain, discuss, summarize, recognize
   c. repeat, list, name, cite, relate, tell, define apply, show, solve, simulate, operate, experiment, calculate
   d. None of the above

3. Having a literacy learner tap out beats to represent the syllables in words:
   a. is an example of experiential learning
   b. may indicate that the teacher has determined the learner has a preferred learning style that is auditory
   c. is incorporating two of Gardner’s multiple intelligences, body/Kinesthetic and music/rhythmic into the learning activity
   d. all of the above
   e. none of the above

4. “Dualism” or “received knowledge” is characterized by the notion that:
   a. truth is absolute
   b. the role of the student is to learn all the “right” answers
   c. teachers are authority figures and are responsible for imparting knowledge to students
   d. all of the above
   e. none of the above
5. An “inclusive” learning environment is characterized by:
   a. Teacher-centredness
   b. Hands-on learning
   c. Learner-centredness
   d. Theme-based learning
   e. None of the above

6. The educational philosophy of “progressivism” emphasizes:
   a. behavioural change in learners
   b. social change through the power of education
   c. that learners must be actively involved in determining educational problems, objectives and outcomes
   d. development of the intellect through mastery of content
   e. personal growth and development

7. The “affective domain” refers to:
   a. Internal and external factors that influence learning
   b. How students feel emotionally and physically when learning
   c. Physical and psychological factors that are both internal and external to the student and which influence learning
   d. All of the above
   e. None of the above

8. Learning will likely be ineffective or diminished when:
   a. the preferred learning style of students does not match up with the preferred learning style of the teacher
   b. the educational philosophy of teachers does not match the educational objectives of the learning activity
   c. the educational objective is not appropriate to the learner’s stage of intellectual development
   d. all of the above
   e. none of the above
MODULE 3: PUTTING IT ALL TOGETHER

Contents

Section 3.1: Teaching and Learning along a Continuum
   3.1.1: Influencing Factors
   3.1.2: Pratt’s Model of Direction and Support
   3.1.3: Taylor’s Model of the Learning Cycle
   3.1.4: Points to Ponder

Section 3.2: Professional Development
   3.2.1: Points to Ponder

Section 3.3: Conclusion

Section 3.4: Quiz

SECTION 3.1 TEACHING AND LEARNING ALONG A CONTINUUM

Although many adult educators view facilitated learning as the approach of choice for teaching and learning with adults, as stressed throughout this course both directed learning and facilitated learning have their place regardless of the age of the learners. Directed and facilitated learning are not an “either-or” proposition, but more accurately can be viewed as a continuum along which the educator moves based on the particular learning situation. This, of course, begs the question:

How do we decide where to position ourselves on the teaching-learning continuum?

3.1.1: Influencing Factors

As discussed in the previous two modules, there are a number of factors to consider about where to position ourselves on the teaching-learning continuum at a given point in time. These can be summarized as follows:

- The educational philosophy of the teacher – The educational philosophies discussed in Module 2 range from the pedagogical (i.e., behaviourist, liberal) to the andragogical (i.e., humanist, progressive, radical). According to Zinn (1994), all educator’s have at least one and possibly two dominant philosophies. While teachers can use teaching techniques from a different philosophy when a situation calls for it, the difficulty comes in doing so for a sustained period of time. For example, an adult literacy tutor
who holds a humanist-progressive philosophy would be unlikely to fare well teaching **subject-based curriculum**. Similarly, a behaviourist would not be comfortable with **theme-based curriculum**. As such, while we need to move along the teaching-learning continuum in our day-to-day role as educators, we must identify the philosophy we believe in, understand its implications for practice, and choose a teaching situation accordingly.

- **The learners’ level of intellectual development** - Based on Perry’s model of **intellectual development**, where we position ourselves on the teaching-learning continuum depends a great deal on what stage our learners are at in terms of their intellectual development and where they need/want to go. For example, a learner who is at Stage 1 (**dualism** or “black and white” thinking) would not fare well towards the facilitated end of the continuum. Similarly, a Stage 3 learner (**relativistic thinking**) would have difficulty working under a directed approach for any length of time. Although a **multiplistic** or Stage 2 learner would be able to move forward or backward with greater ease (i.e., in that the movement is not as much a stretch), the prudent teacher will ease all learners into a different stage slowly and with consideration. As we saw in the story of Gladys, it must be understood that not all learners will want to move to a different stage. Whether or not adult educators accept this, however, is a personal decision and as has been touched on, is the subject of much debate in the field.

- **The learning styles of students** – One inventory that is particularly relevant to the notion of a teaching-learning continuum is Gregorc’s Style Delineator. A preferred style that is towards a concrete-sequential style would do well in a **directed learning** environment, while an abstract-random thinker would do well in a **facilitated learning** environment. A position more towards the middle of the continuum or a blended approach would be best for both concrete-random and abstract sequential learners.

- **The educational objective** – We can describe objectives by the **depth and type of processing** we want to accomplish. To use Bloom’s taxonomy of educational objectives, surface level processing relates to acquiring knowledge/skills, mid-level processing to comprehending and applying knowledge/skills, and **deep level processing** to analysis, synthesis, and evaluation of knowledge/skills. Towards one end of the continuum, learning is mainly concerned with **content** mastery, whereas at the other the focus is mainly on **process** or the development and refinement of critical thinking skills. In between of course, there is an emphasis on both content and process to greater or lesser degrees depending on what is called for in the individual situation.
The table below summarizes some of the aspects of teaching and learning that should be considered when deciding where on the continuum to position ourselves:

<table>
<thead>
<tr>
<th>Pedagogy</th>
<th>Andragogy</th>
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<td>• Directed learning</td>
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<td>• Dualistic thinking (Stage 1)</td>
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<td>• Concrete-sequential learning style</td>
<td>• Abstract-random learning style</td>
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<td>• Training</td>
<td>• Education</td>
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<td>• Active</td>
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Making judgments based on the influences on teaching and learning discussed above can be overwhelming, especially to novice tutors. However, as we will discuss in the next section, Pratt (1988) offers a useful framework for thinking about how to balance and adjust to these multiple factors.

### 3.1.2: Pratt's Model of Learner Direction and Support

Pratt (1988) suggests that adult educators need to determine two key things about learners; that is, how much direction and support each learner requires. “Direction” refers to the knowledge/skills learners have when they come into the learning environment and what they need/want to achieve, while “support” relates to physical and emotional needs/wants.

#### Tips for Tutors

- Learning is facilitated when the learners’ existing knowledge and skills are assessed to identify their strengths and weaknesses, and to determine which components essential to the learning context may be missing. (MacKeracher, 1999, p. 42)
- Learning is facilitated in learning environments which are free from threat and which provide support for personal change. Learning activities need to include opportunities for testing new behaviours in relative safety, developing mutually trusting relationships, encouraging descriptive feedback, and reducing fear of failure. (MacKeracher, 1999, p. 41)
For learners who require a great deal of direction and support we will need to move towards the **directed learning** end of the teaching-learning continuum. For those who need very little in terms of direction and support, we will be need to move towards the **facilitated learning** end. For those who require either support but not direction and vice versa, we need to move into the middle range of the continuum.

As MacKeracher (1996) notes in the “Tips for Tutors” above, the amount and type of direction a student requires is a relatively straightforward process of assessing strengths and weaknesses, assisting learners to set goals, developing appropriate learning activities, providing feedback, and so on. What exactly we mean when we talk about “support,” however, is a little less clear. Cromley (2000) notes that with student populations such as adult literacy learners, it is easy to fall into the trap of praising them for making it to class. Often they have overcome multiple obstacles just to be there and we are reluctant to add to their “load.” Cromley, however, suggests that this can actually interfere with learning:

**Schools have learned the hard way that students’ self-esteem is based on their real learning that comes from hard work, not simply from giving positive messages and avoiding personal attacks. The student with the strongest feeling of “I know I will be able to learn the material for this class” are the ones who are taught the skills they need and have proven to themselves that their success in school comes from their hard work, not from luck, pleasing the teacher or going through the motions of school without effort. In other words, feeling competent comes from success, not from being told you are competent** (p. 176).
But what of students like Gladys and Rita whose learning appears to cause them disruption and/or discomfort?

3.1.3: Taylor’s Model of the Learning Cycle

As Taylor et al (2000, p. 15) write, it is reasonable to suggest that just undertaking learning indicates a desire to or expectation of change:

In my experience, many more learners are at the threshold of change than realize this fact. Even those who start out saying, “I just want a piece of paper” or “I need this for my job” often find that what they really wanted was to look at their life choices in new ways.

Marilyn Taylor (1987) suggests that discomfort is a natural and necessary part of the learning process. However, as her model of the learning cycle below indicates, she believes students can work through the discomfort with the support of the educator.

- **Stage 1 – Disorientation:** The learner is presented with an unfamiliar experience or idea which involves new ideas that challenge the student to think critically about his/her beliefs and values. The learner reacts by becoming confused and anxious. Support from the educator at this point is crucial to the learner’s motivation, participation and self-esteem.

- **Stage 2 - Exploration** - The tutor assists the learner to “name” (identify) the problem so that the learner will see that the disorientation comes from an unresolved/complex issue rather than any inadequacy on the learners part. The tutor then assists the learner to search for information which can be used in resolving the problem or issue experienced in the Disorientation Phase.

- **Stage 3 - Reorientation** – This stage is characterized by synthesis of the information gathered and reflected on during the Exploration stage. The educator’s role in this stage is to encourage and guide the learner through the process of reflecting critically on the information. The role of the tutor is also to assist the learner to achieve a degree of acceptance of the idea that learning can evoke disorientation and/or discomfort.

- **Stage 4 - Equilibrium** – The emotional intensity of the previous three stages is markedly reduced by the time this stage is reached and the learner displays an obvious sense of comfort with/acceptance of the new knowledge/skill. The role of the educator is to encourage the learner to apply/extend the knowledge/skill it to new situations, as well as to share it with others.
One adult educator (MacKeracher, 1999, p. 194) goes so far as to present Taylor’s model directly to her students. As she writes:

*I sometimes introduce Taylor’s model in a course when I sense that many learners have become confused and are convinced they are not smart enough to be in the class. By introducing the model, I provide them with an easy way to re-enter the dialogue with others and share their concerns…. The most frequent response [to Taylor’s model] is: “Why didn’t you tell us this would happen? I thought I was the only one who was confused and anxious. I thought I was crazy (or stupid)."

It may seem to novice practitioners that getting on top of what influences teaching and learning with adults is like trying to juggle too many balls at once.

However, with experience generally comes the confidence and the ability to deal with these complexities. Experience, however, is not just about learning the technical aspects of teaching. As we shall see in the next section, it involves ongoing professional development and reflective practice.

**3.1.4: Points to Ponder**

Taylor designed her model of the learning cycle with learning situations in mind where the focus is on critical thinking. Would her model be relevant to an adult literacy program that focuses on upgrading academic/literacy knowledge/skills and is more directed in its approach? Why or why not?
SECTION 3.2: PROFESSIONAL DEVELOPMENT (PD)

As an adult educator, do I need to go beyond acquiring and fine-tuning my repertoire of technical teaching skills/knowledge?

As touched on by Zinn (1994), adult educators need to do more than merely learn the technical aspects of teaching. Hargreaves (2000) suggests that members of a profession need to continually reflect on what they do, why, how to do it better, and what moral/ethical issues should be addressed. He identifies four stages which he suggests professionals need to move through in order to develop including:

- **Stage 1: Preprofessional**: This first stage in an adult educator’s development is focused on learning the technical aspects of teaching; that is, how to develop and utilize a limited number of teaching strategies, assessment and evaluation techniques, managerial skills such as report writing, classroom management, and so on.

- **Stage 2: Autonomous**: Once we achieve a level of comfort with the technical aspects of teaching, typically we begin to reflect on the “why” of doing what we do. It is at this stage that we begin to identify our educational philosophy (although often we do not “name” our philosophy per se). At this stage we tend to reflect as individuals rather than in group settings. For example, a tutor trained in pedagogical techniques might begin to question whether directing learning is really about educating students, or more about training them.
- **Stage 3: Collegial**: The next stage according to Hargreaves involves “cultures of collaboration” (p. 164). That is, ongoing, reflective discourse among members of a profession, in this case adult educators. As discussed in the section “Reflective Practice” following this, Stage 3 is not about learning more advanced technical skills/knowledge. Rather, it is about group discourse concerning the problems of the profession or what Louden (1992) refers to as *problematic reflection*. For example, in adult literacy this might involve a discussion forum among practitioners about the proliferation of computers in society and whether or not this should affect the form and function of the field. Hargreaves suggests that this stage must be “embedded in daily practice.” Obviously, this requires that some formal or informal effort be directed at bringing educators together on an ongoing basis to engage in this type of dialogue.

- **Stage 4: Post-Professional**: The final stage involves including other “stakeholders” in reflective discourse about the profession. “Stakeholders” refers to those who have an interest in the conduct and outcomes of the profession (e.g., in adult literacy this might mean involving learners, various community organizations, business organizations, government, members of academia, and so on). Representatives of these stakeholder groups are consulted regularly in order to more fully inform practice.
This stage is also characterized by a deeper level of reflection and an element of advocacy or what Louden (1992) refers to as *critical reflection*. That is, practitioners question the underlying assumptions of their profession and investigate moral and ethical issues. For example, pressure is continually being brought to bear on adult literacy to focus attention on employment-related goals in that they are easy to evaluate in terms of cost-benefit, justify in terms of resource allocations, and rationalize to the public. At the same time, they raise questions for the field in that to adopt such a narrow focus would marginalize many adult learners. Thus, reflection of the sort that Quigley [1999] refers to as "a counterhegemony of critical analysis" [p. 256] is undertaken by practitioners in an effort to investigate and resolve social justice concerns. An important aspect of critical reflection is action; in this case bringing counterpressure to bear on governments to support the inclusive nature of the field.

Hargreaves suggests that for a variety of reasons, most educators stall at the autonomous stage. One reason is that collective PD, when it does occur, tends to focus on advancing technical skills/knowledge rather than problematic reflection. In addition, while it may be desirable to develop both the individual and the profession as a whole through Stage 3 and 4 PD, it is easier said than done. Both stages require ongoing reflective dialogue between tutors and other adult stakeholders. Practically speaking this demands substantial resources, something most areas of education (adult literacy in particular) can ill afford.

### 3.2.1: Points to Ponder

- A. Are there benefits to engaging in individual and/or collective critical reflection and if so, what might these be?

- B. What barriers might there be to embedding Stage 3 PD in the everyday practice of adult literacy tutors?

### SECTION 3.3: CONCLUSION

In adult literacy we will not often be towards the far end of the *facilitated learning* end of the continuum. Our students come to us because they do not have the skills/knowledge related to literacy and by extension, other areas that they need to function well in their everyday lives of (e.g., parenting, the workplace, life skills). As discussed in this module, Pratt (1988) proposes that determining the type and amount of direction and support each learner requires, will guide us in the development of a “game plan” for each learner.

We are also guided by reflecting on our individual beliefs about human nature and the purpose of education. Is it acceptable to remain towards the lower to middle range of the continuum? Those of us who hold a *behaviourist philosophy* of education would be inclined to say that it is perfectly okay to do
so, while the humanists among us would suggest that this is a suitable as a starting point only. Humans need to grow and to mature, to be independent and self-directing, and it is our job to assist this process.

While our educational philosophy is a strong influence on how we approach teaching and learning, we also need to ask ourselves what is most effective in each individual learning experience. Throughout this course, it has been suggested that teaching and learning are most effective when viewed as a continuum, the continuum being a “toolbox” of sorts that tutors can reach into and draw out appropriate tools to match the situation.

In closing, as Professor Leblanc from York University, winner of a Seymour Schulich Award for Teaching Excellence suggests:

*Good teaching is about not always having a fixed agenda and being rigid, but being flexible, fluid, experimenting, and having the confidence to react and adjust to changing circumstances.*
SECTION 3.4: QUIZ

1. Hargreave's Stage 4 or Post-Professional level of PD:
   a. focuses on the technical aspects of teaching
   b. is characterized by individual reflection
   c. focuses on the ethical and moral issues of a profession
   d. all of the above
   e. none of the above

2. Directed and facilitated learning:
   a. are best viewed as an “either-or” proposition
   b. use techniques that cannot be combined effectively
   c. are best viewed as a continuum which is underpinned by a range of educational philosophies
   d. all of the above
   e. none of the above

3. The position one adopts along the teaching-learning continuum is influenced by:
   a. Societal pressures to teach using a particular approach
   b. the amount of direction and support needed by learners
   c. the culture in which the learning takes place
   d. all of the above
   e. none of the above

4. The purpose of professional development in adult education is to:
   a. reflect critically on the problems associated with the field
   b. learn the technical skills/knowledge required to teach effectively
   c. identify the moral and ethical issues associated with the field and take appropriate action
   d. all of the above
   e. none of the above

5. A pervasive myth in adult learning theory is that:
   a. An andragogical approach can be used with both children and adults
   b. adults and children learn much differently
   c. the needs/wants of students are important, but not key to effective learning
   d. all of the above
   e. none of the above
6. Which of the following is most accurate in regard to Pratt's model of teaching and learning:
   a. The key to effective learning is a flexible approach in teaching. Educators must adjust their teaching based on learners' motivation and participation.
   b. Educators must adjust their teaching based on the amount of direction and support required by learners.
   c. all of the above
   d. none of the above

7. The technical aspects of teaching:
   a. are learned in the second of Hargreaves four stages of professional development.
   b. comprise only one aspect of what Hargreaves suggests teachers require to develop professionally.
   c. are the most important aspect of teacher development according to Hargreaves.
   d. all of the above
   e. none of the above

8. A tutor's position on the teaching-learning continuum in the field of adult literacy will most often be:
   a. At the andragogical or facilitation end of the continuum.
   b. At the pedagogical or directing end of the continuum.
   c. Shifting upwards and downwards around the middle range of the continuum.
   d. All of the above
   e. None of the above
REFERENCES


**RECOMMENDED READING**


# ANNEX A: SCORING KEY FOR MODULE QUIZZES

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ANNEX B: DISCUSSION OF “POINTS TO PONDER”
AND ADDITIONAL ACTIVITIES

Below please find a short discussion about each of the “Points to Ponder” from the three course modules. An additional group and/or individual activity has been added to each point to extend your thinking about the topic further. Toward this end, text and online resources have been provided for each activity. These range from simple to more advanced so that you may choose those which suit your particular level of experience and ability.

MODULE 1

1.2.1: Reflecting on your own tutoring experiences, have you used an approach that was more toward the andragogical end of the continuum? If so, what were you hoping to gain? If not, why?

Taylor, Martineau and Fiddler (2000, p. 15) offer the following as their rationale for utilizing an andragogical approach in their practice as adult educators:

*We also suggest (and research confirms) … that information-focused approaches to learning often leave learners’ underlying assumptions intact. Reproductive learning is unlikely either to challenge existing beliefs and interpretations or—of particular note to those involved in workplace education—to enable learners to use information in new settings.*

While it is tempting for many of us to subscribe wholeheartedly to a facilitated approach, as Brockett (1994, p. 10) cautions us, flexibility is crucial to effective teaching:

*In their enthusiasm to embrace an approach that clearly holds much promise, some educators may take the extreme position that self-direction is the best, indeed, the only effective way for adults to learn. This is simply not so! As educators of adults, we need to recognize the vast array of approaches and philosophies available to work successfully with adult learners and to recognize the inherent limitations of any approach* (p. 10).

Knowing where to position oneself on a teaching-learning continuum will depend on many factors, a major one being the purpose of the activity. As Brundage & MacKeracher (1980, pp. 58-59) suggest, a *pedagogical or directed approach* is best used to help learners “acquire specific skills and knowledge relevant and essential to specific tasks and performance (e.g., driving a car, speaking a foreign language, becoming a certified plumber).” Some educators refer to this as “training” rather than educating students.

An *andragogical or facilitated approach* they suggest, is best used to help the learner “discover personal meanings within knowledge, skills, and attitudes...
already learned; discover new meanings within experience; [and] create new meanings, values, skills, and strategies from integrating new and old learning (e.g., learning to “be a professional;” self discovery …).

**Individual or Group Activity**

Brainstorm a list of strategies for teaching in a directed and facilitated fashion.

**Resources:**


1.3.1: As we move toward the facilitation end of the continuum, the notion of “learner-centredness” takes on increasing importance. Reflect on your own experience as a tutor and think of an example of how you have (or could make) your own teaching environment more learner-centred.

“Learner-centredness” relates to both the content and process of adult literacy, and can range from the individual to the program level. At the individual level, it can involve framing learning activities around a learner’s interests or needs (content), to collaborating with the student to set goals and/or plan learning activities and assessment strategies.

At the program level, learner-centredness can involve the actual development and running of a program. For example, the following is an example from an
adult literacy program in Kitchener, Ontario in which the notion of “learner-centredness” was integrated into the development of the program:

When the program began at St. John’s Kitchen, we went into it with the philosophy that we were trying to provide learning for people who were not able to access other adult education programs. We thought it was important to ask people who were interested in improving their reading and writing skills how they would best be able to do that. I asked about the best times to meet during the week, and whether or not people wanted to meet in a group or individually with a staff person or tutor… We found that in the program at St. John’s, adults felt they were being listened to and they were able to learn some literacy skills that were relevant to their daily needs (Draper & Taylor, 1992, p. 234).

Norton (2000) suggests that many adult literacy programs involve students in the running of programs in an effort to be more learner-centred:

In programs, learner involvement has included serving on boards, assisting with program operations and fund raising, speaking to the media, participating in tutor training, forming student groups, and peer tutoring (Chapter 2).

Ball (1996) suggests that the benefits of being more learner-centred include:

… the potential to promote both personal and social change because [it] provide[s] learners with opportunities to:

- validate their language, experiences, and knowledge and become aware of their own capabilities and power;
- acquire new tools for expanding their knowledge and understanding of both personal and community issues;
- develop a critical awareness of the social and political sources of the problems they confront as individuals and as members of their communities;
- use all forms of language to explore, reflect upon, and dialogue about those issues;
- articulate solutions and take action in the direction of positive change.

Writing about the learner-centred approach of The Learning Exchange program in Saint John, New Brunswick, Wells (1992) suggests that the staff and board hold fast to this approach simply put, “because it works” (p. 380). Like Ball (1996), Wells views the main benefit of learner-centredness as empowering learners:
learners get jobs because they can read and write more effectively. Their confidence and self-esteem is heightened and they like themselves more. The life-benefits seem obvious, but are sometimes subtle. Learners become leaders, they help others, they peer tutor, they take hold of problems and they begin to control their own environment (p. 388).

Individual Activity

Develop a list of situations when a tutor might choose to adopt a learner-centred approach, and when s/he might use a teacher-centred approach. What factors influence a tutor’s decision-making in this regard?

Group Activity

Facilitate a discussion regarding the following question:

- What do we do if being learner-centred (i.e., responding to the needs/wants of our learners) means that we need to be more teacher-centred (i.e., learners want us to teach in a traditional or pedagogical manner)?

Resources:

1.4.5.A: How might a family literacy learning unit on positive discipline proceed through the four stages of Kolb’s experiential learning cycle?

One example of using Kolb’s experiential learning cycle in a family literacy activity focusing on positive discipline is as follows:

- **Concrete Experience** – Parents in a family literacy class are provided with information about positive discipline, then work through a number of role playing exercises.
- **Reflective Observation** – The parent learners are asked to write about or discuss their beliefs regarding discipline.
- **Abstract Conceptualization** – The parent learners discuss the moral, legal, psychological issues involved in disciplining children.
- **Active Experimentation** – The parent learners try out the techniques learned with their children at home.

**Individual or Group Activity**

Brainstorm a list of teaching strategies that could be used in each stage of the cycle.

**Resources:**


1.4.5.B: Should personal maturation/change be a direct goal of education as transformational learning would suggest? Why or why not?

In a recent study regarding the roles and responsibilities of adult literacy teachers, Magro (2002) reported that participants (adult literacy educators) had many reservations about the role of the teacher as “change agent” or “transformative educator.” Merriam and Caffarella (1999, p. 385) suggest that there are no simple answers to the ethical dilemmas raised by approaches such as transformational learning:
The systematic knowledge that we do have about the context of adult learning, who the adult learners are, why and how they learn ... is only partly helpful in making ethical decisions. Societal, community, professional, and individual values play a much larger role in shaping our practice. Competing courses of action and alternative choices, each with its own merits means that educational planners, instructors, and learners themselves must examine the beliefs and values that form the basis for choosing among alternatives. It is this kind of awareness—awareness of why we do things the way we do—that leads to responsible, ethical practice in adult learning.

Awareness of one’s underlying philosophy regarding education (Module 2, Section 2.3.1), and the adoption of a critically reflective attitude towards one’s profession (Module 3, Section 3.2) are two ways in which adult educators can develop the “awareness” that leads to “responsible, ethical practice.”

Individual or Group Activity

Develop a list of advantages and disadvantages to transformational learning from the point of view of each philosophical orientation (Module 2, Section 2.3.1).

Resources:

1.4.5.C: What responsibilities would an educator who is adhering to a humanist philosophy have toward teaching and learning? Reflect on your own tutoring and experiences as a student. Have you used and/or experienced a humanistic approach? Did it help and/or hinder the effectiveness of learning? How so?

MacKeracher (1996, p. 230) writes:

As a facilitator, the humanistic model reminds me that I have important responsibilities to:

- Create a climate valuing learning and reducing disincentives or obstacles to a minimum
- Help the learner to clarify learning needs, purposes, and objectives
- Organize and make available the widest possible range of resources
- Present myself as a flexible resource to be used by the learner
- Behave in simultaneous roles – as a co-learner who can and will learn from and with the learner; an objective observer who can respond to the individual needs and feelings of the learner; and a subjective participant who will act on and share feelings, needs and responsibilities

An important point raised in MacKeracher’s characterization of a humanist educator is the notion that students should be encouraged to relate to the educator in a much more personal manner than has typically been the case in traditional education. While most adult learners will flourish under this approach, for other students it can actually hinder learning in that some perceive the role of a teacher as an authority figure whose role it is to impart knowledge.

**Individual or Group Activity**

Develop a list of teaching and classroom management strategies that a humanist educator would and would not tend to utilize.

**Resources:**

2.2.5. A: How might you incorporate physical learning styles into an activity that focuses on assisting a group of learners with improving their spelling?

Shaughnessy (1977) writes:

*The ability to spell grows slowly out of a number of different kinds of encounters with words – with the sounds of words (phonological encounters), the look of words (visual encounters), the feel of words as the hand moves to form them in writing (kinesthetic encounters), and the meanings of words as they take their places in the context of sentences (semantic encounters)* (p. 161).

In essence then, by incorporating techniques that address each sense in your instruction, the physical learning styles of all learners in your group will be covered. Some ideas for spelling activities which incorporate physical learning styles are provided below:

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<th>Activity</th>
<th>Example(s)</th>
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<tr>
<td>Rhyming</td>
<td><strong>Beginners</strong> - Give learners a list of words of 5 to 10 words and ask learners to come up with rhyming words from the same word family (freeze, sneeze, breeze; crack, smack, lack, back, hack, track; cut, hut, nut, but, gut, rut). <strong>Intermediate</strong> - Move on to words that sound the same but are spelled differently (freeze, please, peas, leaves) <strong>Advanced</strong> - Move to homonyms (words that sound the same but are spelled differently) (e.g., red, read; to, too, two; won, one), and then to words that are spelled the same, but said differently (cut, put; cough, dough)</td>
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<tr>
<td>First letter mnemonics</td>
<td>Use the first letter of the words in a made up sentence to remember a spelling. <strong>Big Elephants Aren't Ugly</strong>, they are <strong>BEAU</strong>tiful.</td>
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<td>Image associations</td>
<td>When there is confusion about which homonym to use, associate the words with an image (e.g., Which is the head of the school? The &quot;principle&quot; or the &quot;principal&quot;? The principal is my &quot;pal&quot;)</td>
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<td>Technique</td>
<td>Explanation</td>
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<td>Find words within words</td>
<td>The learner wants to spell &quot;business&quot; as &quot;bizness.&quot; Point out the &quot;bus&quot; in the correct spelling and have him/her imagine a bright yellow school bus (this is also an image association)</td>
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<tr>
<td>Say the word in a 'funny' way</td>
<td>The student keeps leaving the &quot;h&quot; out of &quot;when&quot; so together you say the word as &quot;w&quot; &quot;hen&quot;)</td>
</tr>
<tr>
<td>Use different sizes or colors</td>
<td>Write the part the learner is having difficulty remembering in a different size or color</td>
</tr>
<tr>
<td>Link word to known words</td>
<td>Link site to its word family, bite, kite</td>
</tr>
<tr>
<td>Beat out the syllables of a word and write out each part as it's said</td>
<td>&quot;leg-is-la-ture&quot;</td>
</tr>
<tr>
<td>Use rhythm</td>
<td>Say the names of the letters in a singsong rhythm</td>
</tr>
<tr>
<td>Break words into chunks</td>
<td>- You can start with one-syllable words and divide them into two or three letter chunks.</td>
</tr>
<tr>
<td></td>
<td>(e.g., great - gr / ea / t)</td>
</tr>
<tr>
<td></td>
<td>- Then you can go on to bigger words, and sound out the syllables or letter blends.</td>
</tr>
<tr>
<td></td>
<td>(e.g., terrific - ter / rif / ic)</td>
</tr>
<tr>
<td></td>
<td>- When you're chunking, you can also focus on the letter blends.</td>
</tr>
<tr>
<td></td>
<td>(e.g., great - gr / ea / t - that's an 'ea' word, and a 'gr' word)</td>
</tr>
<tr>
<td>Play games related which stimulate word recognition/visual memory</td>
<td>Have a spelling bee, play board games such as Scrabble or Boggle</td>
</tr>
</tbody>
</table>

**Individual or Group Activity**

Brainstorm a list of spelling activities for each of Gardner's Multiple Intelligences.

**Resources:**


2.2.5.B: Reflect on your own experiences as an adult literacy tutor for a moment. What have your students been like in terms of their motivation; their desire to be self-directed/independent in their learning, and their ability to clearly identify their goals with regard to improving their literacy?

As MacKeracher (1996, p.76) writes:

> Adult educators tend to assume that all adults have put dependency needs behind them. In fact, some adults prefer to use "dependent behaviours" rather than independent or interdependent behaviours. Most adults use dependent behaviours in situations which are perceived as novel, emergency, or trauma... If we understand behaviour to extend across a continuum, then we can perceive adults as using behaviours which range across part of that continuum, with most using behaviours from the middle range.

Two important points are raised by MacKeracher. First, much like teaching and learning, behaviour is more accurately viewed as a continuum with dependency at one end and independence at the other. Our students’ need for support will vary and we will need to adjust our teaching accordingly. Second, a negative or threatening environment will increase dependency needs in most adults. As such, the environment we provide for students will need to reduce a sense of threat and promote a feeling of safety.

**Individual Activity**

Develop a list of ways in which tutors may increase and decrease the motivation of adult literacy learners.

**Group Activity**

Facilitate a group discussion regarding the following questions:

- What amount and type of tutor direction and support is reasonable and unreasonable when working with adult literacy learners?
- Does your philosophical orientation influence your opinion about this issue? How so?
Resources:

- *Goal Orientations of Low-Literacy Learners in Adult Basic Education: Some Issues for Adult Literacy Instruction*. Available: http://literacy.kent.edu/cra/2001/goal_orient/link2.html (Ohio Literacy Resource Centre web site)

2.2.5.C: What might you/your program do to decrease learners’ “load” and increase “power”? 

As most adult literacy program staff will attest, *flexibility* is key to our learner population. Adult literacy learners are different from other student populations in several respects. Unlike most other educational venues where students come together for a common purpose, with similar levels of ability and experience, and at specific times and locations, most literacy programs accommodate learners who start at various times throughout the year (rather than start and end on a particular date as a group), and have limited/varied times that they are available to learn due to employment and/or family constraints. While some learners are available to learn on a full-time basis and during regular hours, most are only available part-time and at odd hours due to parenting and employment. Learners also vary widely in their abilities. At any one time, a program may be dealing with a mix of beginning, intermediate and advanced students, who also vary in the strength of each literacy skill (e.g., may be a strong reader, but a less than confident writer and beginner as far as numeracy and computers go). In some cases students can be organized into groups, but often learning must take place on a one-to-one basis.

In general, ways of increasing power and decreasing load relate to the *practical* (e.g., providing day care or one-to-one tutoring in the student’s home for those with children and without childcare support), the *affective* (i.e., ensuring the learning environment is safe and comfortable), and the *cognitive* (i.e., ensuring learning is challenging yet not threatening).

*Individual or Group Activity*
Using the three categories above (i.e., practical, affective and cognitive), list some of the barriers to learning in each, and brainstorm ways in which you/your program might help overcome each of these.

Resources:

- Huget, S (2002). To Enrol or not to Enrol (That is the Question): Nonparticipation in Literacy & Upgrading Programs: Results from a National Study. Available: [http://www2.literacy.bc.ca/pub/NEWSLET/sept02/4.htm](http://www2.literacy.bc.ca/pub/NEWSLET/sept02/4.htm)

2.2.5.D: According to adult learning theory, why would you try to move a student who is exhibiting “dualistic thinking” into more “multiplistic” thinking?

Cromley (2000, p. 210) suggests that:

> Students need realistic ideas about what learning is. Students who think learning is about “just getting the right answer,” will have trouble transferring their knowledge. Students are more likely to transfer if they know that learning is about understanding, not just memorizing facts. For example, a student who actively tries to understand what she reads will remember more that one who reads to “say the words right.” The one who reads for understanding can apply her background knowledge (for example, knowledge about gravity) in new areas (such as plant roots growing down).

An important point raised by Cromley is the notion that educators need to discuss the nature and purpose of learning directly with students.
**Individual or Group Activity**

Using Bloom’s taxonomy (Section 2.4.2), develop a lesson plan about the Canadian Senate that would help learners meet each educational objective.

**Resources:**

- Correspondence between the Evaluation Instruments and Bloom’s Taxonomic Levels: Available: [http://learningandteaching.dal.ca/design.html](http://learningandteaching.dal.ca/design.html)

**2.3.2: Is it important to reflect on your philosophy of education? Why or why not?**

Draper (in Barer-Stein & Kompf, 2001 p. 154) suggests that:

> Articulating our personal philosophy helps us to understand why we behave and think the way we do and to understand the consequences of our behaviour and the influence our philosophy may have upon others. It helps us to be consistent but also challenges us to question our inconsistency. It can help us in communicating with others, providing we take care to question and to openly express our values and assumptions, and in defending our actions…. Articulating our beliefs and values also helps us to bridge theory and practice, to fathom the relationship between education and society, and the various social, economic, political, and cultural forces that influence education.
Individual Activity

Reflect on the following and if possible, discuss with another tutor or staff member:

- How does your philosophy of education “fit” or “mesh” with the adult literacy program/organization you are a part of (i.e., in terms of the program’s mandate, goals, policies and procedures)?

Group Discussion Activity:

Have each member tell the group what his/her results were for Zinn’s Philosophy of Adult Education Inventory. Facilitate a discussion based on the following questions:

- What is the objective of learning in each philosophy?

- What is the role of the following in each philosophy?
  - The tutor
  - The student
  - The community

- Do learners have a philosophy of education and if so, how might this affect the teaching-learning relationship?

Resources:


2.4.3: Reflect on your own learning experiences as a student. Were you able to transfer the knowledge/skills you learned to various “real life” situations? Why or why not?
Cromley (2000, p. 12) writes:

Adults who could do “grocery store math” with 98% accuracy only got 59% of the same kind of questions right on a paper-and-pencil test. They could not transfer their math knowledge from the grocery store math to the test because they did not see that the two tasks were the same… The most difficult part of transfer is “seeing” when a problem that you know how to solve can help you solve the new problem you are facing.

Thus, as the above illustrates it is not simply enough to frame learning around “real life” themes. Rather, it is crucial that we assist our students to connect and apply the skill/knowledge to/in multiple contexts.

Individual and/or Group Activity

1. Develop a lesson plan in which students learn how to calculate percentages and use this to solve various “real world” problems.

2. Develop a list of themes that would be relevant to:
   a. Urban versus rural adult literacy students
   b. ABE/GED programs

If desired, extend this activity to develop a list of themes for other areas/types of adult literacy such as family literacy, workplace literacy, young adult and/or senior literacy learners.

Resources:

- Themes from Rural Life - [http://www.nald.ca/CLR/Theme2/index.htm](http://www.nald.ca/CLR/Theme2/index.htm) (NALD web site under “Literacy Collection”)
2.5.3: Are there any potential dangers to being “culturally sensitive” in our teaching? Please explain.

One “danger” lies in stereotyping learners based on cultural background (e.g., all Aboriginal learners prefer learning materials that are framed around traditional ways). It is important to recognize that we should not "pigeonhole" any learner. That is, all learners will have a preferred, individual style that will be affected in greater or lesser degrees by culture. Thus, while tutors need to take such influencing factors such as culture into account, they must also keep in mind that each learner is unique and is influenced by many other factors as well.

Other “dangers” include:

- being overly sensitive to one culture to the exclusion of another
- coming across as patronizing rather than sensitive to a learner's culture

**Individual Activity**

Develop a list of ways in which tutors can be culturally inclusive in the classroom.

**Resources:**


**Group Activity**

Facilitate a group discussion about the difference between cultural inclusiveness and cultural stereotyping.

**Resources:**

2.6.1: Why do you suppose it is the case that many tutors are concerned about the degree of involvement by government in the field of adult literacy?

There is great concern in the adult literacy community that were governments to play a greater role, they would push employment related concerns to the forefront at the expense of humanistic values. There is some evidence that this concern is justified. For example, in the 1990's the Ontario government instituted its "Commonsense Revolution." Under this initiative, welfare recipients were to be tested on their literacy skills and those who failed were to attend upgrading classes. Marion Wells (1992), Director of the Learning Exchange in Saint John New Brunswick, writes that a main goal of the program has necessarily become:

...to convince employers that they must look at educational philosophies and hear the positive evidence which exists for flexible and humanistic programs. [The Exchange] has to sensitize employers to the plight of those who are afraid of the more curriculum-driven approach of the institutions (p.388).

The tendency of governments to link literacy funding and support to employment related outcomes is also evident at the national level. In 1988 when the NLS was created, it came under the Department of Secretary of State and Multiculturalism and Citizenship Canada. However, it was later moved to Human Resources Development Canada (HRDC) (Shohet, 2001), an indication of a shift in emphasis by the federal government to economic concerns. The announcement of a federal "Learning and Skills Initiative" in the January 2000 Speech from the Throne provides an additional example. In consultation with the provinces, the current HRDC Minister announced that the department is going to develop a national literacy strategy. Roundtable discussions have taken place across the
country and it is telling that they have focused on labour market productivity and the skills and knowledge needed for a knowledge-based economy. The proceedings from the Fifth International Conference on Adult Education in 1997 provide a caution regarding this focus by governments:

\[
\text{A commitment must be made to literacy as a human right. Appropriate resource allocations must be made for adult literacy promotion in all societies without expectation of merely economic returns. Cultural and political consequences must be taken into account as well. The discourse of the market should not be allowed to undermine the concept of literacy as a social good (Literacy for Tomorrow, 1999, p. 14).}
\]

Simply put, the concern is that an over-emphasis on employment related outcomes would result in the marginalization of many adult literacy learners.

**Individual or Group Activity**

Develop a list of ways in which adult literacy stakeholders might become more involved in directing the field of adult literacy in Canada.

**Resources:**

- ABC Canada web site: [http://abclifeliteracy.ca/](http://abclifeliteracy.ca/)
- Canadian Literacy and Learning web site: [http://www.literacy.ca/](http://www.literacy.ca/)

**MODULE 3**

3.1.4: Taylor (1986) designed her model of the learning cycle with educational situations in mind in which the emphasis would be on critical reflection and transformational learning. Would her model be relevant to an adult literacy program that focuses on upgrading academic/literacy knowledge/skills and is more directed in its approach? Why or why not?

Taylor’s model would be somewhat less relevant in a more directed environment in that mastery of content would be stressed rather than thinking skills. Typically this only requires a modicum of personal change in that there tends to be an
emphasis on dualistic/multiplistic rather than relativistic thinking (i.e., William Perry’s schema of intellectual development). That is, learners are not normally encouraged to challenge their view of the world, truth, etc.

That said, any learning endeavour involves change and even a small amount can be a source of disorientation/discomfort for learners (e.g., a learner who is undertaking his/her GED is likely to become less dependent on others which may disrupt existing relationships. For adult literacy learners in particular, many are returning to learning after long periods of absence and/or having had negative past experiences with learning. As such, a fair amount of support may be required even in fairly directed environments.

**Individual or Group Activity**

Tutors must also cope with change in the teaching and learning environment. Discuss the types of change that may be experienced by tutors and ways of coping with this.

**Resources:**

- Imel, S. (2002). *Change: Connections to adult learning and education.* ERIC Digest No. 221, ERIC Clearinghouse on Adult, Career and Vocational Education.

3.2.1.A: Are there benefits to engaging in individual and/or collective critical reflection and if so, what are some examples of these benefits?

As Kompf and Bond (in Barer-Stein & Kompf, 2001) suggest:

> Reflection benefits both teachers and learners, enabling the emergence of differing perspectives, professional development, theory development, integration of knowledge, and an overall making-sense-of-one’s-world (p. 53).

Taylor, Martineau & Fiddler (2000, p. 234) propose that some benefits include:
• Surfacing and questioning assumptions and underlying beliefs, ideas, actions, and positions
• Reflecting on one’s own and other’s experiences as a guide to future behaviour
• Challenging oneself in new realms; taking risks
• Recognizing and revealing one’s strengths and weaknesses as a learner and knower

Individual Activity

Develop a list of ways in which you might foster the following:

• personal self-reflection
• group reflection

Resources:


Group Activity

The following activity is adapted from Taylor et al (2000), and is designed to encourage self-reflection.

Have members of the group pair off and interview one another regarding which of the following two statements is most indicative of their approach:

1. I never take anything for granted. I just tend to see the contrary. I like playing devil’s advocate, arguing the opposite of what somebody is thinking, making exceptions, or thinking of a different train of thought.

2. When I have an idea about something, and it differs from the way another person is thinking about it, I’ll usually try to look at it from that person’s point of view, see how they could say that, why they think they are right, why it makes sense.

Have each pair discuss the advantages and disadvantages of each approach.
3.2.1.B: What barriers might there be to embedding Stage 3 PD in the everyday practice of adult literacy tutors?

Historically in the Canadian adult literacy community, there has been only limited engagement in the type of collective reflective discourse that would enrich and advance the knowledge base in this field. The main reason for this is a lack of opportunity; that is, programs are widely dispersed geographically speaking. As such, only a moderate amount of face-to-face meetings are possible due to the costs involved. Telephonic- and/or video-conferencing are well beyond reach for the same reason… Quigley (1999) writes that, “Given how geographically dispersed adult basic and literacy practitioners are--teaching in cities, towns, villages, and farms using virtually any workable facility--it becomes extremely difficult to reach practitioners” (p. 256). In addition to being geographically disparate, the problem is exacerbated by the fact that programs are only loosely linked by regional organizations and receive minimal resources and support from provincial governments. As such, the cost to collaborate in terms of time, effort and finances has been prohibitive.

Individual Activity

Develop a list of possible ways to make professional development more available to tutors.

Resources:

Group Activity

Facilitate a group discussion regarding the following questions about professional development (PD):

- What areas/topics should be covered?
- Do professional development and accreditation go hand in hand? (i.e. should volunteer tutors be required to take PD?)
- Should all adult literacy tutors be accredited?

Resources:

GLOSSARY

**Aboriginal literacy** - programs that are specifically geared to address the different learning styles, experiences and preferences of Aboriginal learners. Related terms include: multicultural diversity and inclusive learning environments.

**Academic upgrading literacy programs** - literacy programs that are geared toward preparing learners for adult high school. The curriculum is subject-based and roughly parallels the public school grade system. Related terms include: Adult Basic Education [ABE], or General Education Development [GED] programs.

**Andragogy** - an educational approach characterized by learner-centredness (i.e., the student's needs and wants are central to the process of teaching), self-directed learning (i.e., students are responsible for and involved in their learning to a much greater degree than traditional education), and a humanist philosophy (i.e., personal development is the key focus of education). Related concepts include: facilitated learning, self-directed learning, humanism, critical thinking, experiential learning, and transformational learning.

**Active Learning** - In traditional or pedagogical education, material to be learned is often transmitted to students by teachers. That is, learning is passive. In active learning, students are much more actively engaged in their own learning while educators take a more guiding role. This approach is thought to promote processing of skills/knowledge to a much deeper level than passive learning. Related terms/concepts include: experiential learning, hands on learning.

**Authentic Learning** - In this type of learning, materials and activities are framed around "real life" contexts in which they would be used. The underlying assumption of this approach is that material is meaningful to students and therefore, more motivating and deeply processed. Related terms/concepts include: contextualized learning, theme-based curriculum.

**Affective Domain** - This domain relates to how individuals feel emotionally and physically while learning. This includes both internal factors (e.g., physical - hunger, thirst, fatigue, and illness; psychological - willingness to take risks, persistence and attention abilities; attitudes, beliefs, and assumptions) and external factors (e.g., physical - comfort concerns such as temperature, noise and light levels, amount and type of distractions; psychological - personal style of others, stressful situations at work or home, support from others).

**Behaviourism** - the focus of this philosophical orientation to teaching is on developing certain predetermined behaviours. It is characterized by question and answer, repetitious activities such as drills and memorization, and immediate feedback. The teacher is solely responsible for setting learning objectives and
assessing skills/knowledge. Related terms/concepts include: pedagogy, directed learning.

**Cognitive Domain** – This domain concerns to how individuals think; their intellectual capabilities, level of development and preferred thinking styles. Related terms/concepts include: cognitive or thinking styles, intellectual development, critical thinking.

**Content Areas (in Adult Literacy)** - There are a variety of programs available in adult literacy which can be loosely grouped into **general** and **specialized** content areas. General programs are open to any adult and focus mainly on improving foundational content or core literacy skills, whereas specialized programs are directed at a particular group and have a more specific focus in terms of content taught (e.g., family literacy, workplace literacy, ESL). Related terms include: curriculum, subject-based and theme-based learning.

**Contextualized Learning** – In this approach, material is taught in the context in which it would be used in “real life.” The underlying assumption is that the context provides meaningfulness to abstract information, making it more concrete and therefore, easier to learn. Related terms/concepts include: theme-based learning, authentic learning, experiential learning.

**Core literacy skills/knowledge** – The basic material that all adult literacy programs teach including, reading, writing, spelling, numeracy, communication and technology (the computer). Related terms/concepts include: foundational curriculum, basic skills.

**Critical Thinking/Reflection** – refers to a deep level of engagement in thinking. Related terms/concepts include: deep level processing, andragogy, facilitated learning.

**Curriculum** – refers to both the content (the material to be learned), and process of learning (the actions and resources involved in teaching and learning).

**Deep level processing** – refers to a significant degree of cognitive processing of material to be learned, well beyond simple memorization and application (i.e., rote learning or surface level processing), to analysis, synthesis and evaluation. Related theory: Bloom’s taxonomy of educational objectives. Related concepts: intellectual development, critical thinking.

**Directed Learning** – Educational environments that are characterized by the teacher in the role of expert and authority figure, transmitted knowledge and passive learning, standardized curriculum, and mastery of content. Related terms include: pedagogy, teacher-centredness, behaviourism, and passive learning.
**Dualistic Thinking** – The first of three stages in William Perry’s model of intellectual development. Characterized by “black and white” thinking (i.e., there is one correct answer), the teacher as an authority figure responsible for passing the truth along and transmitting knowledge to students, and a behaviourist approach. Related concepts/terms include: black and white thinking, surface level processing, lower order thinking.

**English as a Second Language (ESL)** - although learners in these programs often have moderate to high literacy levels in their primary language, they are not as competent in English. Thus, these programs necessarily combine literacy and language instruction.

**Experiential Learning** – involves the student in his/her learning to a much greater degree than in traditional (pedagogical) learning environments. Related terms/concepts include: active learning, hands on learning, deep level processing, higher order thinking.

**External Motivation** – Motivation comes from outside the learner in the form of tangible rewards and punishments such as competition, grades, awards, promotion, pay, etc.

**Facilitated Learning** – is an approach characterized by a high degree of involvement by students in all aspects of their own learning (e.g., setting objectives, assessment). The teacher adopts the role of a “guide on the side” who provides resources and support to learners. Related concepts include: self-directed learning, experiential learning, and andragogy.

**Family literacy** - programs that offer literacy instruction for the whole family versus adults only. Parenting education and training is offered in addition to literacy instruction.

**Formal Learning** – Learning that is conducted/sponsored by an educational or training organization and leads to some form of recognized certification such as a degree, diploma or certificate.

**General adult literacy programs** – programs that are open to any adult and focus mainly on improving core literacy skills (i.e., reading, writing, spelling, numeracy and computer).

**Humanism** – a philosophical orientation to education which holds that the purpose of education is to enhance personal growth and development. This growth of this philosophy among educator led to a swing from teacher-centred to learner-centred learning environments. Related terms/concepts include: learner-centredness, transformational learning, and facilitated learning.
**Inclusive Learning Environments** - based on the notion that the educator must adjust the learning environment so that all learners can thrive regardless of gender, ethnicity, class, age, sexuality, cognitive and/or physical abilities. Related concepts include: equality in and access to education, humanism, and learner-centredness.

**Informal Learning** – Occurs in everyday life and may not even be recognized as learning by the individual. For example, using a television guide may not be equated by an individual as having learned how to use a table. Related concepts/terms include: incidental learning.

**Information Literacy** - the ability to locate, understand, evaluate, utilize, and convey information at home, at work, and in the community.

**Internal Motivation** – Learners are motivated from within by personal needs/wants that are positive in nature such as a desire to succeed, love of learning, a feeling of accomplishment, or negative such as fear of failure.

**Learner-centredness** – an approach to teaching in which the needs and wants of learners are incorporated into the learning process. Students are actively involved in their own learning rather than passive recipients of knowledge/skills. Related terms/concepts include: self-directed learning, inclusive learning environments, and andragogy.

**Learning styles** – refers to an individual’s preferred manner of processing material, or characteristic style of acquiring and using information when learning. Learning styles can be loosely grouped into physical and cognitive styles. Related terms/concepts include: multiple intelligences.

**Liberalism** – this philosophy of education proposes that the purpose of education is to develop the intellect. The teacher is viewed as an expert and the authority in the classroom whose responsibility it is to direct the learning experience.

**Life skills literacy** - these programs offer a combination of life skills and literacy instruction for specific at-risk populations such as inmates in federal/provincial corrections facilities.

**Multiple intelligences** – this theory proposes that humans possess more than one type of intelligence. Popularized by Howard Gardner who suggested seven different types of intelligence (i.e., visual/spatial, verbal/linguistic, logical/mathematical, bodily/kinesthetic, musical/rhythmic, interpersonal, and intrapersonal), spanning three domains (i.e. the physical, cognitive and affective domains). Related terms/concepts include: learning styles.
**Multiplistic Thinking** - learners at this stage (Stage 2) of William Perry's model of intellectual development accept that there are multiple truths (versus one ultimate truth as in dualistic thinking). Learners do not fully comprehend the underlying argument of these “truths” however, and cannot judge their merits well. The teacher is viewed as being in possession of these multiple truths and responsible for guiding students to them.

**Non-reflective Learning** - demands very little thinking on the learner’s part such as when material is memorized or a simple task is performed. Material is only processed or a skill learned at a surface level. Related concepts: rote learning, surface level learning, lower order thinking.

**Pedagogy** – an educational approach characterized by teacher-centredness. The teacher is viewed as an authority figure and students are not generally involved in decisions/actions in regard to learning. Related concepts include: directed learning.

**Physical Domain** – relates to the five senses and physical being of learners.

**Process** – refers to **how** to think (organize, analyze, evaluate, research, frame and solve problems), rather than **what** to think (i.e., learning a specific skill or content) in regard to learning.

**Progressive Philosophy of Education** – proposes that the purpose of education is to help the learner develop practical knowledge and problem solving skills.

**Radicalism** – a philosophy of education in which the purpose of education is to bring about social, political and economic change.

**Reflective Learning** – refers to a great or deeper degree of processing of material to be learned. Whereas in non-reflective learning, material is simply taken in with little or no active thinking (e.g., memorization) or understanding, reflective learning engages a large amount of the learners thinking or cognitive capacities. Related terms/concepts include: deep level processing, critical thinking, relativistic thinking.

**Relativistic Thinking** – Knowledge in this stage of William Perry’s model of intellectual development is considered to be relative and situational. Learners critically reflect on multiple perspectives and determine the most suitable answer in a particular situation. Related concepts: deep level processing, critical thinking.

**Rote Learning** – learning in a mechanical fashion through repetition (e.g., memorization, practice drills). Related term: surface level processing, non-reflective learning.
**Self-directed Learning** – A learning environment in which students are given a great deal of responsibility for and input into their own learning. The role of the teacher becomes to facilitate or guide learning rather than direct it. Related terms/concepts include: andragogy, facilitated learning, learner-centredness.

**Specialized adult literacy** – literacy that is directed at a particular group and has a specific focus such as parenting, employment, English as a Second Language.

**Subject-based curriculum** - involves standardized material that is tied to that of our public school system. That is, skills/knowledge are grouped according to subject areas (e.g., mathematics, language arts), and divided into chunks or units that are taught in a predominantly linear or sequential fashion. Related terms/concepts: Adult Basic Education (ABE), General Education Development (GED), academic upgrading programs.

**Surface level processing** – skill/knowledge is learned at a fairly simple level, involving little of the cognitive, affective or physical capacities of the learner. Related term: rote learning, lower order thinking.

**Teacher-centredness** – A learning environment in which is the teacher is the authority in the classroom and directs all aspects of the learning environment including setting goals, determining objectives, assessment, etc. Related terms/concepts: pedagogy, behaviourism, liberalism.

**Theme-based Curriculum** - material that is framed around topics related to learners' immediate needs and/or wants (e.g., parenting, employment, financial management, health and nutrition). Related terms/concepts: authentic learning, learner-centredness.

**Transformative Learning** – engaging in learning to purposively question one’s own assumptions, beliefs, feelings, and perspectives in order to grow or mature personally and intellectually. Related terms/concepts: critical thinking.

**Workplace literacy** - programs that offer literacy geared toward employment. In some cases the program will be situated at an employer's site and will focus both on general literacy instruction (e.g., reading skills), as well as specific literacy skills related to the business (e.g., reading technical manuals).
Andragogy: Adult Learning And Education At Its Best?

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ABSTRACT

The andragogical model of adult learning and education developed by Malcolm Knowles, the basis for much of “adult learning theory”, is summarized and reviewed in terms of its assumptions, principles and recommended practices. By recasting the model as a theory with attendant hypotheses, it is then critiqued in terms of its theoretical adequacy and empirical support. Theoretically, the model is found wanting because it slights the full range of adult learning experiences, makes misleading distinctions between adult and child learners, minimizes individual differences between adult as learners, and does not adequately deal with the relationship between motivation and learning. Empirically, research testing the effects of andragogy provides inconclusive and contradictory outcomes. New directions for establishing a better theory of learning effectiveness are suggested.
Andragogy: Adult Learning And Education At Its Best?

It is now well established that adults continue their "education" after completing their normal school years (Cross 1981, Houle 1961, Peterson 1979). Indeed, whether done informally or formally, or whether at work, school or in the home, continued learning and education are a common experience for most adults. With increased leisure time and rapid economic and technological change, the prospects for increased adult education are strong. But while adults can be readily found in organized and/or intentional educational experiences of various kinds, it is not immediately apparent how the educational experience can best be organized and delivered to the adult learner. Two basic questions are at the center of the adult educational phenomenon:

1. Do adults have unique learning requirements and needs for which the educational process should be tailored in order to produce the best results?

2. If so, what are the best way(s) to provide educational experiences to adults?

Beginning in the late 1960's in the United States, the "andragogical" approach to adult education, championed by Malcolm Knowles, provided positive answers to both questions, and in the process, rose to dominate the field of adult education in terms of both its philosophy and technique. Indeed, by some accounts, this approach became “adult learning theory” (Block, 1996). But after almost 40 years, what is the theoretical and empirical status of andragogy? This basic question is addressed in the following four sections. First, a consolidated description of the andragogical model is provided, followed by the second section that summarizes critical assessments of the theory. Third, the empirical research testing andragogical theory is reviewed. The final, fourth section draws conclusions and make recommendations about andragogy as a basis for a theory of adult learning.
Andragogy: Adult Learning and Education According to Knowles

While the term "andragogy" was coined over 150 years ago in Germany and was introduced into American parlance in the late 1920's by Eduard Lindeman (Davenport and Davenport 1985, 1986; Knowles, 1984; Savicevic, 1991), it was Malcolm Knowles who put "andragogy" on the modern adult education map. As Knowles (1968) puts it: “Andragogy (is) the art and science of helping adults learn … based on certain crucial assumptions about the differences between children and adults as learners” (p. 351). Blending the basic tenets of various human growth and potential movements at the time (Boyer, 1984), andragogy rose to a prominent position among practitioners in the adult education field, making “…andragogy … the primary model of adult learning for nearly thirty years…” (Merriam and Caffarella, 1999, p. 276). However, Knowles’ developed his theory with little reference to psychological research (Block 1996), creating potential problems for model validity and accuracy.

For Knowles, andragogy rests on the assumed unique and distinctive characteristics of adults as learners; based on those characteristics, it prescribes a specific set of procedures that should be used for adult educational processes. Specifically, andragogy assumes that adults have different learning characteristics and requirements than children. Therefore, adult educational procedures must be different than the pedagogical procedures used to educate children. Initially, Knowles (1968) positioned andragogy in opposition to pedagogy, where pedagogy was best for children and andragogy, for adults. However, he modified his views in latter works (1979, 1980a, 1987) so that both methods are possible and can be used either with children or adults, depending on circumstances. I will refer to the initial formulation as the Better Theory (or Knowles I); the latter version will be the Depends Theory (or Knowles II). In either model, though, the assumptions about how adults were unique remained constant; what
changed was his view of the conditions under which his “andragogical” methods should be applied.

To understand andragogy, one must begin with what it means to be an "adult". Knowles offered two criteria for evaluating whether or not a learner should be considered an adult. First, the person occupies roles (such as parent or worker) that have been traditionally defined as adult roles. Second, the person's self-concept is that of adult: “He becomes an adult psychologically at the point at which his concept of himself changes from one of dependency to one of autonomy.... To be adult means to be self directing” (Knowles, 1968, p. 351); an adult "perceives herself or himself to be essentially responsible for her or his own life" (Knowles, 1980, p. 24). In the Better Knowles I model, andragogical educational practices should be used with adults, because the unique characteristics of adults require "different principles and techniques from those employed with children" (Knowles, 1980, p. 37). In short, adults are basically self-directed, and andragogy is the activating or enabling environment that best supports self-directed learning.

How are adults different than children? For Knowles (1968, 1972, 1973, 1980, 1984, 1987, 1998), there are six distinguishing characteristics of the adult learner. Note that the key assumptions of andragogy are posited as self-evident axioms that refer primarily to developmental and existential conditions of adulthood; other potential physiological, neurological (see Hill, 2001, e.g.), psychological or sociological factors that can affect learning are not included. The six basic assumptions are:

1. **A self-concept of autonomy and self-direction.** Aging and maturation change the child’s self-concept of dependency and direction by others into the adult’s self-concept of independence, and as a result, adults have a need to be self-directing. When people become adult, “they experience a deep psychological need to be perceived and treated by others as being capable for
Andragogy Adult Learning

Taking responsibility for ourselves” (Knowles, 1984, p. 6.5). Thus, learner autonomy, power and control are key factors in the adult learning process.

2. A higher level of life background and experience. With age comes experience, a reservoir of common sense, and a body of beliefs, rules and background that adults want preserved and prized. Threats to a person's self-concept and understanding of how the world operates can lead to resistance, defensiveness or withdrawal from the learning process.

3. The need to understand the reasons for learning something. The rationale for what is learned and how it is learned should be clear to the adult learner. Teacher-imposed instruction is not acceptable. “It is seldom convincing for them to be told by someone (like the boss) that it would be good for them” (Knowles, 1987, p. 170).

4. A learning motivation based upon personal need. The adult's motivation to learn is derived from the developmental needs of the individual. "The adult ...comes into an educational activity largely because he is experiencing some inadequacy in coping with current life problems” (Knowles, 1972, p. 36). Further, "people become ready to learn something when they experience a need to learn it in order to cope more satisfyingly with real-life tasks or problems" (Knowles, 1980, p. 44). By implication, participation should be voluntary, a condition Knowles (1987) recognizes is not always possible.

5. A pragmatic orientation. Those things about which adults want to learn are the here-and-now, practical issues related to how to better run their lives. That is, adults want to be able to apply and use what they learn to be “able to better deal with some life problem about which they feel inadequate now” (Knowles, 1968, p. 386).

6. An internally driven motivation to learn. Adult participation in learning and educational activities is more a function of their personal needs and issues than externally imposed
requirements to participate (Knowles and Associates, 1984).

In summary, then, adults are assumed to bring distinctive needs and requirements to their organized learning activities for several reasons. Because they see themselves as self-directing, adults want to exercise power, influence and control over the learning experience. They want to preserve their sense of self and their understanding of the world; in part, this means prizing and building upon their large repertoire of personal experience. They want practical answers to real-life problems. As Newton (1977) puts it: "The adult as a learner is pictured as an autonomous, experience-laden, goal-seeking, 'now' oriented, problem-centered individual" (p. 362).

The Theory of Andragogy

Knowles’ model of andragogy is constructed from two distinct domains of phenomena. First, it is a theory of how adults are distinctive as learners; it does not, though, describe a psychology of the learning process. Second, derived from this model of the adult as learner, it provides a set of guidelines or prescriptions for how to best organize and carry out educational experiences for adults. As a theory that promises to join these two domains, the andragogical model should identify both causal, independent variables as well as outcome or effect variables, and should then specify the relationships between them (Dubin, 1969). The basic theoretical assertion of andragogy is that by applying andragogical principles and practices, derived from the unique characteristics of adults as learners, certain outcomes will occur more or better than if those principles and practices are not used. However, Knowles does not operationally define what the outcome variable(s) of andragogy are; instead, outcomes are suggested and implied. Perhaps the closest he comes to describing what those outcomes are can be found in Self-
Andragogy Adult Learning

Directed Learning (1975):

...there is convincing evidence that people who take the initiative in learning (proactive learners) learn more things and learn better than do people who sit at the feet of teachers passively waiting to be taught....They enter into learning more purposefully and make use of what they learn better and longer than do the reactive learners. (Page 14)

Thus, the key contention of andragogical theory is that andragogy should lead to better learning. The problem is that “better” is not well defined. The following hypotheses are all possible interpretations. First, self-directed (andragogical) learners will be more motivated than a control or comparison condition. (Defining what the control or comparison condition presents another problem to the theory, as discussed in the next paragraph.) Second, self-directed (andragogical) learners will be more intentional or purposeful than a control or comparison condition. Third, self-directed (andragogical) learners will learn more than a control or comparison condition. Fourth, self-directed (andragogical) learners will make better use of what they learn than a control or comparison condition. Fifth, in other places (Knowles, 1989), Knowles implies that self-directed (andragogical) learners will be more satisfied with their learning experiences than a control or comparison condition. In the Knowles II, Depends model, these basic postulates would remain the same but with the qualification that they would be mediated by or only hold true in certain conditions. Knowles did not provide a systematic statement of what those conditions would be, however. Instead, the recommendation is that the educator “check out which assumptions are realistic in a given situation” (Knowles, Holton, and Swanson, 1998, p. 69).

There are three difficulties remain at this point in the formulation of his theory. First, if educational practices, motivation, and learning are the key variables, what is the specific nature of their relationship? It would appear that the underlying effect of andragogy is on learner
motivation, and that improved motivation should lead to elevated learning outcomes. If so, the hypothesized relationships between andragogical practices, motivation, learning and, with Knowles II, other “conditions” needs much greater definition and specification. Second, the comparison or control condition is not clear. Is he comparing the effects of andragogy to adults who are in pedagogical education practices and/or to adults who may not be self-directed learners? Since adults are generally assumed to be self-directed learners, the former option seems more likely. Third, the outcome criteria are not clear. While “more” learning presumably means just that (and could be registered as higher average scores on a test, for example), “making better use” of what is learned is less clear. Does “better use” mean more retention over time, or greater transfer of learning or behavior change, and/or what? Of course, answers to these questions do not have to be mutually exclusive and could be combined.

Andragogy Operationalized: How It Works

There are four basic questions for structuring any learning experience (Knowles, 1987):

1. What content should be covered?
2. How should the content be organized?
3. What sequence should be followed in presenting the content?
4. What is the most effective method for transmitting this content?

Under a pedagogical approach, the teacher’s role is to answer and implement the answers to these questions. Under an andragogical approach, the teacher’s job is to design a process whereby the learners both help create their own answers to these questions as well as participate in their implementation. Certain principles (next) are the basis for creating practices and procedures (listed in the following section) that guide the organization and provision of
andragogical learning experiences. (The adult learning characteristics and needs being addressed by each principle are in parentheses.)

1. The adult learner must be able to define what they want to learn (autonomy, personal need, reasons, intrinsic motivation).

2. The plans for the learning program should be made jointly between "teacher" and "student" (autonomy, personal need, reasons).

3. The adult must be involved in the evaluation of the learning program (autonomy, intrinsic).

4. The climate of the learning program must be safe and non-threatening (experience).

5. The program should relate to and include the adult's existing experiences and cognitive structure (experience).

6. Learning activities should be experiential and "hands on" rather than passive and pedagogical (personal needs, pragmatic, experience).

7. Learning should lead to practical solutions to experienced problems. The curriculum should be problem-, rather than subject-, based (personal needs, pragmatic).

8. The proper role of the "teacher" is one of process facilitator and co-learner rather than content expert (autonomy).

Knowles translates these principles for adult education into the following practices and procedures.

1. **Learners should be prepared for the learning program.** This means informing the learner of the differences between being taught and learning on one’s own, how to build learning relationships, how to identify learning resources, and the skills of self-directed learning (Knowles, 1984).

2. **A climate conducive to learning should be created.** While it is important to provide a climate that is physically comfortable, the real focus must be on creating a psychological climate of
safety, acceptance, trust and respect. This is a key responsibility of the facilitator.

3. **A mutual planning procedure should be used** that involves the learner in planning what the learning will cover. This is a “cardinal principle of andragogy” (Knowles, 1978, p. 115).

4. **Diagnosing learning needs.** One basic way to include the adult in planning involves the following two-step process. First, desired learning competencies or outcomes are identified, and second, discrepancies between those desired competencies and the learner's current abilities are noted. The result is a self-assessment of what the learner wants to learn.

5. **Specifying learning objectives:** The adult should be involved in establishing learning objectives. Learner input does not have to be the sole, determinative or final basis for defining objectives, however.

6. **Designing the learning program:** Again, the adult should be involved in selecting and planning the sequence and nature of learning experiences and resources used in the process.

7. **Operating the program:** Here, the teacher acts more in the capacity of a facilitator, resource person and mutual student than as independent expert. Knowles (1978) identified a number of specific actions that a teacher should perform in order to executing the role of facilitator, such as: creating the right mood or climate; helping participants clarify learning expectations and intentions; organizing and making available a wide range of learning resources; and reacting to student inquiries Socratically by asking questions rather than providing “expert” answers.

Table 1 outlines a comparison of the role of teacher in pedagogical and andragogical approaches to education.

8. **Program evaluation:** The learners should evaluate how well their learning outcomes were met, the adequacy of their learning as well as their progress with the material.
A unifying technique that integrates these practices and procedures is the learning contract (Knowles and Associates, 1984; Knowles, 1986). A contract captures learner goals and shows how those goals will be pursued and evaluated. A learning contract formalizes the underlying process; however, a contract is not essential for self-directed learning (Knowles, 1980). 3

These principles do not have to be applied either invariantly or totally (Knowles, 1973, 1980, 1995). Even so, it is not clear to what extent any of these principles must be in place in order for an experience to be considered andragogical and not pedagogical. In particular, are there essential practices that are mandatory, while other practices, advised? The answer would seem to be “yes”. For example, a safe and non-threatening climate is a common recommendation for most educational programs, and it would be difficult to imagine any educational activity being successful that did not take into account what learners already know. Likewise, even though he contends that experiential or hands-on activities are more suitable or appropriate than the didactic methods of traditional pedagogy (Knowles, 1980), experiential activities can easily be part of pedagogically-oriented programs, too, and it is entirely possible for pedagogic programs to provide practical solutions though a traditional curriculum.

What does seem to be essential are those activities in which the learner is involved in identifying what they want to learn, in making plans for the program, and in evaluating the program. In order for these conditions to occur, the role of the "teacher" must be more that of process facilitator rather than content expert. For Knowles (in both I and II), andragogy is more defined by the issues of learner involvement in planning and control of the learning process. Thus, for the purpose of this review, the practices of planning (practice 3 above), diagnosing (4), specifying outcomes (5), designing (6), and evaluating (8) are taken as the essential features of
Knowles’ andragogy. These practices can occur independently; they do not all have to occur together in the same program. That is, one can involve learners in planning but not in evaluation. Thus, presumably, there can be degrees of andragogical implementation. Regardless, one key element is that the teacher functions as a facilitator (7) and will be considered essential for defining the implementation of andragogy, too. All of these practices (3, 4, 5, 6, 7, 8) should be seen as necessary for andragogical learning conditions to exist, and if all are present in the same educational event, they will be considered sufficient for andragogical practice to be said to have occurred.

Andragogy Critiqued

Early critiques of the field of adult education (Hartree, 1984; Lindsay, 1984) point to problems of weak theory and poor research; both are present in Knowles’ theory of andragogy. Several problems with the theory have already been noted, specifically the lack of clear specification of outcomes, and that it is more a prescriptive model for teaching adults than an statement of what is known about the psychology of adult learning. Grace (1996) notes that, for Knowles, adults are basically isolated learners, pursuing their own selfish interests. Each learner stands apart from any social, cultural or political context. In that same view, social institutions and historical circumstances have no impact on learner goals, opportunities, or practices. In short, Knowles’ adult learner is one of “self-reliance and self-fulfillment in which private interests overshadow public ends” (Pratt, 1993, p. 20).

Beyond these concerns, five critical problems with the theory of andragogy can be noted.

1. Andragogical theory does not adequately reflect the full nature and range of adult learning experiences.
Andragogy does not adequately represent the typical experiences of adults in continuing education, particularly in vocational and occupational contexts (Day and Baskett, 1982). For example, in employee training programs, participation is typically required and not voluntary. Learning outcomes are established in advance based on a needs assessment process, and evaluations are conducted to assess the extent to which trainees have mastered those pre-established outcomes. The application of instructional systems design technique (see, e.g., Rothwell and Kazanas, 1992) is clearly antithetical to the andragogical premise of learner control over the planning and execution of learning experiences. In his study of university-based executive development programs, for example, Verlanger (1986) found that andragogical principles were used only rarely, and the principles that were used – experientially-based activities and supportive climates -- are not essential features (as defined earlier) of the andragogical model. Not used at all was learner input into the planning and design of the program. Verlanger concluded that andragogical “program planners have become involved in a closed sub-system of thought and belief about how professionals learn and have developed a body of literature (including andragogy) which is inconsistent with the on-the-job behaviors of professionals” (p. 146).

Consider also the literature on self-directed learning, apart from andragogy. Early research by Houle (1961) and Tough (1971) discovered that most adults continue to be quite active, albeit informal learners. The primary vehicle is the “adult learning project”, an intentional, self-planned and self-guided effort to learn about some topic of interest. These two pivotal studies ignited a number of replication studies in the 1970’s (Clardy, 1992) that found a fairly consistent pattern: about eight to nine of every 10 adults will undertake three to five learning projects per year. Projects consume up to 100 or more hours of time. Of course, as
might be expected, the incidence of self-directed learning projects will vary somewhat by age and occupation. An important point here is that many if not most self-directed learning projects occur apart from any formal, educational program. In general, then, andragogy is more situationally specific than universally applicable (Merriam and Caffarella, 1999).

2. The distinctions between adult and children as learners are faulty and misleading.

Andragogy is presumed to be a better instructional procedure for adults, because andragogical procedures supposedly better match the unique learning requirements of adults. To uphold this position, it is essential that the learning needs and preferences of adults be firmly established. However, it should not be assumed that adult learning processes are different from those of children. Indeed, Travis (1985) illustrates this point by noting the problems presented by disabled adults to this theory. Disabilities acquired during adulthood, for example, often may return an adult to a more dependent learning status. Here, andragogical principles should not be applied uniformly, but rather, educational planning should be geared to the specific needs and conditions of the disabled adult.

More to the point, Knowles’ assumptions about how adults are unique in this regard can be challenged both logically and empirically. While adults may need to understand the reasons for learning something, it is possible that they may also allow and even trust educators to lead them through learning experiences without being informed of the rationale for those experiences. In the 1970’s, “large group awareness training” programs, like Erhard Seminars Training (est), attracted multitudes of adults who were put through a variety of intimately personal and sometimes publicly humiliating activities on-command and without explanation (Pressman, 1993).

While adults may like pragmatic, “how to” answers, it is also possible that they can
appreciate knowledge as something intrinsically valuable, even if it has no instrumental use. Missing from the image of the adult andragogical learner is simple curiosity. Adults may seek to learn something because it interests them or satisfies a pure joy of learning. Rossing and Long (1981) studied the relative importance of curiosity vs. relevance for 79 adult students in a university-based continuing education program. Even though respondents indicated that the perceived practical value of material to be learned was more important as a source of motivation to learn, curiosity was also a motivating factor.

That adults have a well-developed life experiences crystallized in a cognitive structure that should be acknowledged in educational settings is clearly important, but the actual significance of this point for educational purposes is uncertain. For example, an adult already knowledgeable about genealogy (a well-developed cognitive structure on the topic) who is attending a class in genealogy would present one unique instructional situation. But what about the same person attending a class in the basics of accounting, a topic in which she has no background? What relevance would life experience and well-developed cognitive structure have in that case?

The distinctive characteristics of adults as learners are the basis for the distinction between andragogy and pedagogy. Trying to bolster support for andragogical teaching methods means searching for evidence to support those distinguishing characteristics; this endeavor is unlikely to be unproductive (Merrian, 2001). Rachal (1983) noted that a less charged distinction -- between teacher-directed and student-directed learning -- has been around for some time. By using these terms, the problems associated with distinguishing between adult and child learning conditions could be avoided.

Yonge (1985) agrees that "the qualitative differences [in how adults and children learn]
are not enough to sustain an andragogy-pedagogy distinction" (p. 161). Even so, Yonge contends that the distinction between pedagogy and andragogy should be kept -- but based upon the phenomenological nature of the learning relationship. Specifically, the difference between pedagogy and andragogy is not based upon differences between the presumed learning capabilities of adult and child but rather from differences in the nature and purpose of the learning relationship. "A situation of pedagogy always involves an adult assisting a child to become an adult" (p. 162). There is an element of involuntariness to this relationship, and its purpose is to help the child mature. The essence of an andragogical relationship, on the other hand, is an adult helping an adult, the purpose being to help that person become more actualized and fully developed. The difference between andragogy and pedagogy may be useful to keep, albeit not for the reasons advocated by Knowles’ theory of andragogy.

3. The implication that adults are basically the same in learning needs, motivations and requirements is wrong.

The clear implication in Knowles’ andragogy is that all adults tend to share certain basic learning orientations, that they tend to enter learning situations with the same motivation, look for the same kind of outcome and react in much the same way to their learning experience. Yet there are likely to be distinct differences among adults in their desire, capability and readiness for learner-controlled instruction and self-directed learning (Long, 1998; Pratt, 1988). For example, while individuals may resist being placed in dependent learning positions because of their self-concept of autonomy and self-direction, they may also prefer to learn in a pedagogical manner for any number of reasons, including a realization that they do not know enough to direct their learning and/or because being taught pedagogically may simply be more efficient in terms of time and effort. Davenport and Davenport (1985b) found differences among adults on
learning orientations. Check (1984), for example, surveyed learner preferences among 154 adult students at the University of Wisconsin-Oshkosh. Of the 119 responses, fully half wanted the instructor to determine course content and set course objectives; 70% preferred having the instructor schedule daily class activities. Sheehan (1992) assessed the degree of andragogical learning preferences among two groups of university students: traditionals (average age 20 years) and non-traditionals (average 36 years); the latter group indicated a greater but not exclusive preference for andragogical approaches to learning. While not final, these studies do suggest that adults differ in their preferences for andragogical learning practices and procedures. In short, adults participate in educational programs with different motives and preferences for learning, not with an invariant andragogical outlook.

Indeed, a substantial amount of adult education research in the 1980’s surveyed reasons reported by adults for participating in educational programs. These studies followed on Houle’s (1961) early research that identified three main reasons for adult participation: learning is pursued either as an instrumental activity to help the adult accomplish a goal, or as a means for social activity for being with others, or is pursued for the intrinsic value of knowing. Boshier and Collins (1985) compiled the responses of more than 13,000 adults, drawn from 54 different survey files, to the Boshier Education Participation scale (a 40 item Likert-type scale asking about learning orientation). Analysis revealed three clusters of responses that approximated Houle’s initial categories. Merriam (1988) noted that adult learner motivation is the most heavily researched topic in adult education, and that the findings have been remarkably consistent. Clearly, the reasons for participating in adult educational activities are many. The more plausible assumption, then, is that there are individual differences among adult learners in terms of their needs for structure and direction and their differing abilities to become
self-directing. Those needs can vary with age and by subject matter.

4. Autonomous self-directed learning is a special, not universal condition.

Chene (1983) questions whether autonomy in learning is a viable premise on which to base a theory of learning. An andragogical learning experience, seeking to provide maximum autonomy, fundamentally assumes that adults are qualified and capable of determining what and how they want to learn, and that each adult learner is the final judge of the value of the learning. The danger in this position is that any and all learning is seen as equal in value: whatever one person learns is as valid and worthwhile as what anyone else learns. In other words, there is a radical individualizing, solipsistic potential within andragogy.

For Chene, the andragogical position is deficient in three ways. First, adults in educational programs about which they know little decide cannot be expected to determine what learning activities and resources are appropriate and suitable for the tasks at hand. Beginning learners in particular are unable to plan and evaluate learning in a topic about which they are relatively unprepared. Second, while knowledge is socially created from meaningful experience, knowledge also becomes “objectivated” (Berger and Luckman, 1965). Disciplines based on science (like medicine) or professional practice (such as law) exist as a body of knowledge to be comprehended and understood by learners. In these domains, learning must reach some benchmarked level or standard; that is, evaluative decisions about what has been learned should not be left to student self-assessments. In short, all “learning” is not equal in the eyes of each learner. Finally, regardless of the extent to which a program leader tries to act as a facilitating co-learner, the function of teacher as judge is often still required. In this capacity, the teacher’s function is to validate or affirm the quality and degree of what the person has learned. For Chene, educational practice is about more than just motivational readiness: criteria of learning
should be met, and the acquisition of new abilities should be confirmed -- both of which require the presence of an instructor in a mode of judge or evaluator.

5. **The hypothesized relationship between motivation and learning is weak.**

   Mouton and Blake (1984) accept the point that motivation and learning effectiveness are correlated; however, as they see it, the relationship can be negative, not positive as Knowles assumes. Further, Mouton and Blake accept that motivation is an important concern in adult education, agreeing that adults do want to be self-directing. In their view, both pedagogy and andragogy affect motivation and learning, albeit in different ways. The relationships between the two instructional approaches and their effects on motivation and learning can be seen in Table 2.

   Table 2 about here
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   They argue that pedagogy creates a poor motivating climate for learning, because it keeps the teacher in a full authority position, irritating the adult's need for self-direction, even though learning occurs through the teacher’s expertise. The better motivation derived from andragogy (due to the reduction in the authority position of the teacher), on the other hand, comes at the expense of reduced content. But, "in the [andragogical] effort to transfer responsibility to students, the teacher cannot simply abandon students to their insufficient resources” (p. 6). What andragogy gains in motivation its loses in content and presumed learning quality. Their solution to this paradox is a synthesis of both models, proposed as yet a third approach to adult education which they call *synergogy* or “working together for shared teaching” (p. xi). A synergogic approach seeks to avoid the demotivating conditions of pedagogy and the denuded substance of andragogy through the use of self-directing learning teams; they outline four learning designs
that provide depth of information through highly participative, self-directed learning activities.  

In summary, as a theory of adult education, andragogy suffers from a number of problems in explaining learning effectiveness for adults. It does not adequately cover the full range of learning and educational experiences that adults face. The differences between adults and children as learners are incomplete and dubious. It discounts those motivations to learn based on anything other than pragmatic application, and while andragogy may produce heightened learner motivation, improved motivation comes with a price of lowered substantive content and learning. It implies a uniformity to adult learner needs and motivation that masks important individual differences between learners. It imputes to adults more capability for and interest in self-directed learning than is likely. The radical subjectivism implicit in andragogical theory makes any and all learning of equal value, a position that slights the “objective” nature of knowledge and the learning required to master it. Particularly in occupational contexts, teachers serving as experts, not facilitators, are needed to certify that learning has in fact reached the level of acceptable standards.

Andragogy: The Empirical Assessment

Knowles’ andragogical theory can be assessed empirically in two ways. First, are the assumptions of how adults are unique learners correct, complete and important? The adequacy of these assumptions, including research bearing on them, has just been reviewed and found wanting. Second, the major test of andragogy as a theory is in terms of whether the prescribed methods of educational practice actually work as predicted. That is, what are the effects of using andragogy in practice? Do andragogical methods actually produce better learning results as predicted?
A number of studies have tested this issue. The available literature on andragogy was examined along with searches in several electronic data-bases to identify studies of andragogical practices and various outcomes. Screening criteria included the following standards:

1. At least some of the subjects included in the research must be adults. Studies using only children or adolescents were excluded.

2. Even though the predicted outcomes of andragogical education are not specified clearly, a dependent variable of "learning" or achievement had to have been measured.

3. The preferred research design should be experimental (Rachal, 1994). Minimally, there should be some comparison or control condition. Pre-experimental or quasi-experimental studies were included to the extent that they met the other criteria.

4. Finally, the essential features (as noted earlier) of the andragogical method must be present in some degree in at least one of the experimental conditions.

Given this framework, research on the effects of andragogy are often bedeviled by serious problems. First, as already discussed, there are difficulties in operationalizing andragogical theory for research purposes. Reported “andragogical” studies may not include all “essential” elements or may not include any. Second, studies often must use quasi-experimental, non-randomized designs; the threats to validity from such designs include pre-existing differences, history, and testing, among the more obvious. Third, andragogy is supposedly a method that rules out the use of traditional instructor designed and administered tests. Yet it only by the use of standardized tests that effects on learning can be accurately and reliably measured for comparison purposes.

These problems can be seen in Rachal’s (1994) review of the research literature on andragogy. He looked at 18 studies, mostly unpublished dissertations, that purportedly tested the
relative effectiveness of andragogical methods. Without a clear definition of what an andragogical treatment includes, any number of studies can claim to test andragogy even though they may not actually do so. For example, Rachal included the study by Richardson and Birge (1995) that compared an “andragogical” university class in physiology with a more traditional pedagogical approach to the same course. The “andragogical” class still used 75% of class time in “didactic teacher-centered lecture format”; the remaining time was spent in group discussions of instructor-selected topics. Students were required to write essays rather than take the multiple-choice exams of the controls. There were no differences in learning, although students liked the “andragogical” class better. But in this study, the essential features of andragogy as argued here -- student input or control over to what learn and how – were missing. Indeed, this study was not a fair test of andragogical effectiveness, because it was not clear that andragogical principles were actually being tested.

The review here will concentrate on the experimental or quasi-experimental studies that manipulated some or all of the critical features of andragogical methods in educational programming with adults. Table 3 provides a summary of the studies reviewed here.

Several non-experimental studies provide suggestive findings. In a series of studies on the effects of programmed instruction in various technical training courses, Mager and Clark (1963) essentially used an andragogical approach in allowing students to control their progress through the curriculum. Compared to the prior training programs, learner controlled instruction seemed to improve motivation and learning. McKeachie, Lin, Moffet, and Daugherty (1978) identified the teaching styles used by 21 teachers in University of Michigan undergraduate
introductory psychology courses. Both student motivation to learn about psychology and student learning achievement in the course were measured. Four kinds of teaching styles were identified: expert, authority, facilitator, person. While the facilitator and person styles (arguably andragogical in nature) were associated with greater motivational impacts, there were no significant differences in learning among the various styles.

Conti (1985) used a different design to test achievement (learning) in terms of "teaching style". He had a sample of twenty-nine teachers of adults complete a self-report inventory that measured their teaching style. These teachers taught adult basic education, G.E.D. and English as a second language courses in south Texas. The teachers provided the data on student achievement. The teachers reported favoring a pedagogical orientation. Further, the more the pedagogical orientation, the better the student achievement, especially at the G.E.D. level. According to Conti, G.E.D. students are very goal-oriented and the pedagogical approach seemed to worked best for them.

Beder and Carrea (1988) offered all the teachers in a larger New Jersey adult education program the option to attend a 9-hour training program on andragogical teaching principles. The training included how to use andragogical methods to determine learner needs, involve students in planning, and apply self-directed learning. All teachers returned to their teaching duties and data were collected at the end of the courses. While the andragogical-based classes had better attendance, there were no differences between groups on participant evaluations of the instruction received.

Stronger evidence can be found in the studies that tested the effects of andragogical methods under more controlled experimental conditions. Contrary to prediction, the following studies found that andragogical methods were no better—indeed, were often worse—than
traditional pedagogical methods in learning achievement. Early research on the basic question looked for differences between teacher-centered and student-centered programs. For example, DiVesta (1954) tested the effects of instructor-centered and student-centered approaches to teaching on learning achievement tests, attitudes about leadership and behaviors in a 20-hour human relations training program for 118 Air Force personnel. While not a test of andragogy per se, the student-centered program included many of the elements of andragogical practice, including extensive student involvement in planning and carrying out learning activities, experiential learning, individual problem focus and extensive peer interaction. Both methods produced more learning, attitude and behavior change than the control group. However, there were no significant differences in learning between the two instructional approaches, although the instructor-centered program did tend to produce more learning and change than did the student-centered program.

A similar research study was reported by McLoughlin (1971). Subjects were participating in an extended Civil Defense Staff training program. While subjects for the experimental and control groups were not randomly selected, there were no major pre-treatment differences between samples, nor was any systematic selection factor identified, and sample equivalence was assumed. The experimental groups were fully involved in planning their training and the controls were not. Subjects were measured in terms of attitude about the program and in terms of learning. While the experimental group scored significantly higher on attitude (satisfaction) scores, again there was no significant differences in learning between the treatment and control groups (indeed, the control group again scored slightly higher on learning). "No evidence was found to support the notion that sharing the decision on course content and design ... will produce a measurable increase in achievement" (p. 34).
Rosenblum and Darkenwald (1983) studied the effects of andragogy on adults in a supervisory training program for nurses. An experimental group was included in program planning during the first session using a nominal group technique; the control group simply received the training that had been designed by the treatment group. There were no meaningful differences in either learning or in satisfaction as a result of participation in the learning design. The control group scored slightly higher on learning than the experimental (andragogical) group.

Thomas and Klein (1994) randomly assigned 71 managers from a Northern Ohio hospital into four groups who were involved in 8 3-hour supervisory training programs. The two experimental groups were given a 15-minute briefing on student participation. While the subjects in the experimental group reported higher levels of participation, there were no differences in learning, participant reactions or transfer based on level of program participation.

Other studies using similar research designs found that andragogical programs producing more learning than pedagogical counterparts. Cole and Glass (1977) used a randomized, pre- and post-test only experimental design with a control group; 18 employees in a Patient Care training program in a North Carolina hospital participated. The members of the experimental group participated in pre-course diagnosis, planning and design; the control group took the course established by the first group several months later. Both trainee attitudes about the program as well as learning achievement (measured at the conclusion of the program and again one month after the completion) were assessed. At the conclusion of the program, the andragogical, participation group showed significantly more learning but this advantage did not last a month. There were no differences in attitudes about the subject matter, although participants in the andragogical group had a significantly better attitude about the course.

Working with 69 foreign students, Pine (1980) randomly assigned them to either participative
design groups or control groups. Participative groups scored significantly higher on both measures of learning and attitudes about the program. Madriz (1987) compared andragogical and pedagogical approaches in in-service education among 90 teachers in Venezuela. Both learning achievement scores and satisfaction attitudes were higher for members of the andragogical programs.

In summary, the research results are very inconsistent. Studies tend to show that andragogical approaches to adult learning and education often do not perform as predicted. The initial Better theory (Knowles I) predicts that andragogical methods will invariably lead to better learning than pedagogical methods for adults; this hypothesized relationship is not supported by the research. The Depends Knowles II version predicts better learning under certain conditions; while some studies find andragogical gains over other approaches, it is not clear when or why these differences exist. In general, the findings from available studies on the effectiveness of this adult educational technique are weak and inconclusive at best. Indeed, the evidence suggests that andragogical approaches are, as often as not, no better than and often less effective than the more traditional pedagogical alternative when it comes to learning. Likewise, the effects of andragogical programs on affective attitudes about the program are inconsistent. There was some evidence that andragogical programs improved learner motivation. However, this finding is limited by the small number of studies assessing motivation.

A next step in empirical assessment of andragogy would be to conduct a meta-analysis of the research. Such analysis should include a more comprehensive search for research studies. It would be essential to correctly code the studies in terms of treatment interventions for the exact nature of the andragogical treatment(s) used, as well as any distinguishing conditions (like topics covered, settings, experience levels of participants, etc.). It would also be useful to examine the
kind of learning measures used and whether those levels are differentially impacted. For example, using Bloom et al.’s (1956) hierarchy of learning objectives, would andragogical practices produce differences between learning at the basic rote knowledge level and learning at the highest synthesis or evaluation levels?

So we are left with this rather curious situation: the theory is dubious but still seems to work some of the time. That is, the method can be as good as traditional pedagogical methods in learning outcomes and may lead to higher participant satisfaction in some cases, but in other situations, those outcomes are reversed. It would appear that something is going on, but whatever it is cannot be explained by Knowles’ model. If this latter point is true, so-called “adult learning theory” as embodied by andragogy is due for significant revision. Explaining when and why andragogy as a theory is wrong will move us one step further to understanding what approaches are right. The concluding section takes up this issue in terms of directions for future research.

Summary and Conclusions: Andragogy and Adult Education

By the latter third of the Twentieth Century, we know that adults not only can but do continue learning in one way or another after completing their compulsory education. The discipline of adult education emerged to track and explain this phenomenon. By the 1970’s, Malcolm Knowles’ model of andragogy became the prevailing paradigm of theory and practice. Knowles argued that andragogy is the method of choice for educating adults because it more adequately addresses the distinctive learning needs and requirements of the adult learner. Unlike the teacher-controlled classroom, the andragogical learning experience is one in which "teacher" becomes a learning facilitator and co-learner with the "student" as an equal partner in the
learning process. According to the theory, andragogical methods, by providing autonomy and actively involving adults in this learning process, should produce more and/or better learning for the adult participants than would the traditional pedagogical approach.

Yet, as presented here, a critical examination of the theory and research finds andragogical theory lacking on several counts. To begin with, there are problems with the model itself. Key assumptions about how adults are different than children are questionable. The model itself is underspecified, with neither its essential treatment components nor its key outcomes clearly identified. Further, andragogical methods just do not seem to work as predicted; that is, they do not seem to yield the implied promised fruits of more or better learning. In short, as a foundation for adult educational theory and practice, it is time to scrap Knowles’ andragogical theory in order to reconstruct a more accurate and complete model of how people learn and, in turn, how to help them succeed in that endeavor. Notable efforts have been underway for some time (Jonassen and Grabowski, 1993; Merriam and Cafferella, 1999). The question becomes how to proceed with the reconstruction. Can we learn anything from Knowles’ work that can guide us to improved theory and practice? The following discussion attempts to draw the lessons from Knowles’ work that can be useful in reconstruction.

First, almost by definition, a study of adult learning and education implies that the adult is somehow or other different than children and these differences are critical for defining educational practice. As already covered, this approach is misleading in several ways. For example, in Knowles’ model, the presumption is that something happens in the course of becoming an adult that transmutes a child’s learning interests and capacities into an entirely new state. Those differences are defined more in existential than psychological or social terms. Continuity and even growth in the same learning motivations, capacities and behaviors are not
factored in. But even further, his assumptions about adult differences have questionable standing as universal descriptors of adult learners. It’s not that the assumptions are necessarily right or wrong; indeed, they can be both, depending. It is more helpful to understand what kinds of characteristics are operating for specific individuals in specific learning situations. Those characteristics are likely to vary by individual and by situation. Blanket, universal claims of generic adult learning distinctiveness are doomed to failure. Thus, one important lesson from Knowles’ work is that a model that assumes static and universal differences between adults and children is going to be ineffective.

Knowles did not adequately account for the learning process. Had he concentrated on how people (adults or children) learn, he might have been able to make more of an advance. As is known now, a number of individual difference factors affect the quality and nature of learning. Jonassen and Grabowski (1993) have catalogued some of them as cognitive abilities (intelligence), cognitive controls (such as field dependence/independence or cognitive complexity), cognitive styles (visual or verbal preferences), learning styles, personality traits, and prior knowledge. Other factors include learner mastery or performance orientations (Elliott, McGregor and Gable, 1999) or self-efficacy beliefs ( ). In short, more attention should be paid to diagnosing individual differences in learning capabilities and expectations using important and valuable factors that actually impact learning. In this way, distracting differentiations between adults and children can be avoided. Indeed, an important need is to develop a standard battery or diagnostic procedure for assessing learners. Thus, a second lesson is that differences among (adult) learners are both likely and important to understand. But those differences may involve factors other than and/or in addition to his assumed differences between children and adults (see Holton, Swanson and Naquin, 2001, for a discussion of these issues,
made in the context of andragogical theory).

Knowles did not do an adequate job identifying the types of learning situations in which adults may find themselves. In Knowles I, all adult learning events are considered essentially the same. But this is not the case: there can be highly individualistic and autonomous self-directed learning activities well as organized, group-based programs, offered on a formal, for-credit or for-licensure basis, or an informal basis; they can be work-related or personally-based; they may be voluntary or mandatory. This neglect of the range of educational and learning experiences truncates the reach of his model. Thus, third, a new theory must account for the full range of learning and educational situations in which adults might find themselves. Situations can be defined in terms such as the demands placed on learners, roles played by learners and “instructors”, resources available, and the learning opportunities that are typical of each situation.

Because of these weaknesses, he was not able to provide a more nuanced or comprehensive approach to educational practice. That is, by not seeing differences between situations or between adults, he could not identify what practices would best match what situations and/or with what learners. There is just too much variability in both situations and adults for one “size” of educational practice to fit all. At least two solutions to this problem are possible. First, contingent models of instruction propose to match different forms of instruction to learner characteristics (Grow, 1991; Pratt, 1988). In practice, this approach may be an impossible task of adapting instruction each learner. So, alternatively, it may be possible to expand learners’ repertoire of preferences and styles so that they can succeed by more flexibly adapting to different learning conditions and situations. Thus, a fourth lesson must be that any new theory should attempt to inform educational practice by showing which instructional or
learning practices may be appropriate in which situations.

In addition, Knowles andragogical model and its critiques have suggested certain variables that deserve more specific testing. For example, the andragogical model melds together two factors – learner autonomy and problem-based, experiential learning – into one undifferentiated procedure. But these factors can be treated independently. The basic question becomes: does either factor have its own unique main effects on either learning, motivation to learn, or participant satisfaction with the process? Is there an interaction effect? A basic factorial design could help clarify relationships between the two practices of autonomy and learner control and experiential activities on various dependent outcomes.

Malcolm Knowles was a pioneer in surveying and plotting the adult learning and educational terrain in the United States. Now, its clear that his map is not as good a representation as possible, and that a new map is needed. We need less of a theory of adult education and more of a theory of learning effectiveness, recognizing that adults may create unique challenges, not because they are necessarily different than children, but by virtue of the capabilities and limitations they develop and accumulate over the years and across a variety of learning tasks and situations that make each person unique and distinctive. We can develop a better map by learning from his early efforts.
List Of References


Block, KK. (1996). What is adult learning? Course design issues in educational psychology. ERIC ED 396 159.


Hill, LH. (2001). The brain and consciousness: sources of information for understanding adult
learning. *New Directions for Adult and Continuing Education*, 89, Spring, 73-80.


Knowles, M., Holton, E.III, & Swanson, R. (1998). *The Adult Learner (5th ed.)*. Houston, TX:


Richardson, D. & Birge, B. (1995). Teaching physiology by combined passive (pedagogical) and active (andragogical) methods. *Advances in Physiology Education*, 13, 1, s66-s74.


Thoms, P. and Klein Thompson, HJ (1994). Participation and evaluating outcomes in


Table 1. The Role Of The Teacher In Pedagogy And Andragogy

<table>
<thead>
<tr>
<th>FUNCTION</th>
<th>PEDAGOGY</th>
<th>ANDRAGOGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Planning</td>
<td>Makes both content and process decisions unilaterally</td>
<td>Works with students to mutually agree to content and process</td>
</tr>
<tr>
<td>Primary Duty of Teacher</td>
<td>Provide and manage the content of the course</td>
<td>Guide the learning process</td>
</tr>
<tr>
<td>Assumptions about the Learner</td>
<td>Insufficient background and ability to learn content without teacher</td>
<td>Valuable experience and ability allow active learner involvement</td>
</tr>
<tr>
<td>Participants</td>
<td>Captive audience and compulsory attendance</td>
<td>Voluntary attendance</td>
</tr>
<tr>
<td>Affective reactions</td>
<td>Learner feelings about experience not important</td>
<td>Learner feelings about content and process are very important</td>
</tr>
<tr>
<td>Evaluation</td>
<td>Learner is unable to evaluate the value of past learning</td>
<td>Learner is continually evaluating the utility of past learning and needs for further learning</td>
</tr>
<tr>
<td>Assumptions about the teacher</td>
<td>The teacher is the expert and authority</td>
<td>The teacher is a co-learner</td>
</tr>
</tbody>
</table>

Table 2. Presumed relations between motivation, learning and instructional style (from Mouton and Blake, 1984).

<table>
<thead>
<tr>
<th>Instructional Model</th>
<th>Outcomes Domains</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Motivation</td>
<td>Learning</td>
</tr>
<tr>
<td>Pedagogy</td>
<td>--</td>
<td>+</td>
</tr>
<tr>
<td>Andragogy</td>
<td>+</td>
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</tbody>
</table>
Table 3. Studies of Andragogy in Practice

I. Experimental tests of Andragogy

<table>
<thead>
<tr>
<th>STUDY</th>
<th>SAMPLE; DESIGN</th>
<th>ANDRAGOGY TREATMENT</th>
<th>OUTCOMES MEASURED</th>
<th>FINDINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DiVesta (1954)</td>
<td>118 Air Force personnel; experimental</td>
<td>Student involvement in planning and learning activities;</td>
<td>Learning, Attitude and Behavior change</td>
<td>No differences in learning between methods compared to control; instructor-led method had more learning and behavior change</td>
</tr>
<tr>
<td></td>
<td>design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>McLoughlin (1971)</td>
<td>Civil Defense Staff training</td>
<td>Experimental group was involved in planning program</td>
<td>Attitude to program; learning</td>
<td>No differences in learning; experimental groups was more satisfied</td>
</tr>
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<td></td>
<td></td>
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<tr>
<td>Cole and Glass (1977)</td>
<td>18 hospital employees; randomized pre and post experiment with control group</td>
<td>Climate setting; experimental group involved in diagnosing needs, planning, setting objectives, design and evaluation</td>
<td>Learning, Attitudes about subject and about course</td>
<td>Experimental group had more immediate learning but no differences in retention after 1 month; no differences in attitudes about subject, but more favorable attitudes about course</td>
</tr>
<tr>
<td>Pine (1980)</td>
<td>69 foreign students; randomized</td>
<td>Involvement in program planning</td>
<td>Learning and attitudes</td>
<td>Both learning and attitudes were better in the participative groups</td>
</tr>
<tr>
<td></td>
<td>experiment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rosenblum and Darkenwald (1983).</td>
<td>Adults in nursing supervisor training; experiment</td>
<td>Experimental group was involved in program analysis and planning</td>
<td>Learning; program satisfaction</td>
<td>No differences in learning or satisfaction; control group showed better learning</td>
</tr>
<tr>
<td>Madriz (1987)</td>
<td>90 teachers, Venezuela; random pre and post experiment with control group</td>
<td>Amount of participation involved in program planning</td>
<td>Learning and satisfaction scores</td>
<td>Both learning and satisfaction were higher in andragogical groups</td>
</tr>
<tr>
<td>STUDY</td>
<td>SAMPLE; DESIGN</td>
<td>ANDRAGOGY TREATMENT</td>
<td>OUTCOMES MEASURED</td>
<td>FINDINGS</td>
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<tr>
<td>Thomas and Klein</td>
<td>71 managers in Ohio hospital attending 8 3-hour supervisory training programs</td>
<td>2 experimental groups</td>
<td>Participation reactions; learning; transfer of training</td>
<td>Experimental (andragogical) groups had higher participation but no differences in learning, reactions or transfer</td>
</tr>
<tr>
<td>(1994)</td>
<td></td>
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<tr>
<td>II. Non-experimental Designs</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Mager and Clark</td>
<td>Several single-group designs in electronics and engineering training</td>
<td>Learner-controlled instruction: students decide on sequence and pace</td>
<td>Motivation and learning</td>
<td>Both improved relative to norms of traditional training experience</td>
</tr>
<tr>
<td>(1963)</td>
<td></td>
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<tr>
<td>McKeachie et al.</td>
<td>21 teachers, U. Michigan undergrad psychology majors</td>
<td>Post hoc identification of teaching styles used</td>
<td>Motivation to learn; student achievement</td>
<td>No differences in learning; facilitator styles had greater motivational impacts</td>
</tr>
<tr>
<td>(1978)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Conti</td>
<td>29 teachers of adult basic education</td>
<td>Post hoc self-report on teaching styles</td>
<td>Learning</td>
<td>Teachers favored pedagogy. Pedagogy associated with more learning.</td>
</tr>
<tr>
<td>(1985)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Beder and Carrea</td>
<td>130 New Jersey teachers of various adult ed programs All volunteered for training</td>
<td>All received 9 hours training in andragogical method</td>
<td>Attendance; participant evaluations; given to all AE classes</td>
<td>Students with teachers trained in andragogy had slightly better attendance but no differences in student evaluations of program</td>
</tr>
<tr>
<td>(1988)</td>
<td></td>
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</tbody>
</table>
Endnotes

1. As Merriam (2001) noted, a second “pillar” to the field of adult learning and education was “self-directed learning.” The relationship between andragogy and self-directed learning is a bit complicated. Knowles refers to andragogical adult learners as “self-directed learners”, connoting their ability to make decisions about how an educational experience will be structured. But the context of his views is in terms of organized educational experiences. A less context-bound version of self-directed learning is found in Houle (1961) and Tough (1971), where learning projects were the unit of analysis. Learning projects may or may not involve participation in organized educational programs. For Knowles, andragogy is a process for organizing learning experiences that enable self-directed learning to occur. Other kinds of self-directed learning can occur outside of and apart from organized learning experiences, though.

2. In his 1989 volume on *The Making of an Adult Educator*, Knowles reviews research on andragogy. The studies he includes are not experimental, the review is not systematic, and contrary findings are not reported. He does use one criterion consistently, though: participant reactions to or satisfaction with the program in which they are participating. Thus, it is reasonable to conclude that Knowles sees participant satisfaction as an important outcome of andragogical programs.

3. In his review of research studies on andragogy, Rachal (1994) contends that the use of a “learning contract” is the essential feature of the andragogical approach. This position creates problems for his review; see endnote 5 below. However, Knowles (1980) says that “learning contracts are not essential ingredients of self-directed learning” (p. 98); he does indicate that they are the best way he’s seen for organizing self-directed learning, though.

4. The designs they propose are called clarifying attitudes, performance judging, team
effectiveness, and team member teaching; all of their approaches share a cooperative learning structure. Under these approaches, the teacher becomes a learning administrator, responsible for forming and helping the learning teams, encouraging individual efforts, and using subject matter experts to prepare the structured learning materials that form the basis for the team learning activities.

5 In his review of andragogical research, Rachal (1994) used learning contracts as the defining characteristic for including studies. Most of these studies, though, did not include one “cardinal” feature of andragogical method: learner input into the planning and design of the learning program. Since learning contracts may just as easily be applied in pedagogical courses as andragogical ones, using that standard is a misleading criterion for screening studies. As a result, this review is flawed because it includes research that may not be correctly classified as testing “andragogy.”

6. Rachal (1994) suggests that andragogical methods cannot truly be tested when attendance at an educational event is required. While this is an important condition that may in fact mediate outcomes, Knowles did not include that in the theory. As such, it will not be added as a stipulation here.

7. Jonassen and Grabowski (1993) identify and review various instruments available for assessing each of the factors they reviewed.

**Characteristics of Adult Learners with Implications for Online Learning Design**

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The online educational environment is increasingly being used by adults and should be designed based on the needs of adult learners. This article discusses andragogy, an important adult learning theory, and reviews three other adult learning theories: self-directed learning, experiential learning, and transformational learning. During this discussion, the theories are examined for the ways in which they may be applied to the design of online learning environments. In addition, the characteristics of adult learners are examined, and an analysis of how these characteristics influence the design of an online learning environment is presented. Recommendations follow regarding how to design an online classroom environment while considering the application of adult learning theories.

The adult learner and the manner in which he or she learns best have been questioned and researched since the 1920s, when adult education became a professional field of practice (Merriam, 2001). Today, several theories and models attempt to explain adult learning. One of the most well known theories is Malcolm S. Knowles’ learning theory of andragogy, the art and science of helping adults learn. Andragogy is a learning theory that is designed to address the particular needs of adults, and it is based on the idea that there are significant differences in learning characteristics between children and adults (Knowles, 1980).
This article presents a framework for integrating adult learning theories with recommendations for designing an online environment to meet the needs of adult students. This article introduces the characteristics of adult learners. Following this discussion, the concept of andragogy is presented. This presentation will provide not only andragogy's strengths, but also its weaknesses and limitations. Due to these limitations, the author will present an overview of three other important adult learning theories—self-directed learning, experiential learning, and transformational learning. These theories provide information that may help the instructor or instructional designer in creating an online or distance learning program for adults. Considering both the characteristics of adults and adult learning theories, recommendations that synthesize this information will be made regarding how to design an online environment that will best meet the needs of adult students.

**ADULT LEARNING THEORIES**

Today, most adults conceptualize learning as an instructor-designed and instructor-led endeavor that occurs in classrooms where students sit to learn from the "sage on the stage." This is the model with which most adults grew up (Tweedell, 2000). However, many adults want to take advantage of online learning environments, primarily due to their busy schedules and the online format’s convenience. They are using technology with different sets of expectations that are based on their personal histories (Tweedell). Instructors need to be aware of what adults want and need. Learning theories and models, such as andragogy, are important for instructors to understand as they work with adults in an online or distance learning environment. Ausburn (2004) completed a study that supported the view that learners with different characteristics may not only prefer, but benefit, from different instructional features and goals. The next section of this article reviews important characteristics of adults that should be considered when designing an online learning environment.

**Characteristics of Adult Learners**

Most adults were taught in a traditional and passive classroom. Online learning environments are also new to instructors, who have to learn new
methods for teaching in this kind of setting. Learners and instructors both need to adapt and change as they learn how to use this new medium. Additionally, instructors, instructional designers, and other professionals working in the design of online environments for adults must understand adult learning theory, especially in terms of its relationship to distance or online learning. According to Moore and Kearsley (1996), "most distance education students are adults between the ages of 25 and 50. Consequently the more one understands the nature of adult learning, the better one can understand the nature of distance learning" (p. 153).

More distance learning programs are being developed annually; therefore, increasing numbers of adult learners will be tapping into this new resource for education. According to the U. S. National Center for Education Statistics (2002), 56% of all 2- and 4-year degree-granting institutions offer distance education courses for all types of students. The Sloan Consortium's fourth annual report (2006) on the state of online education in U.S. higher education reported: (a) almost two-thirds of all schools offering face-to-face courses also offer online courses, (b) the growth rate of online enrollment between 2004 and 2005 was 35%. The year 2004-2005 demonstrated the largest increase in the number of online students as well as the largest percentage increase in online enrollment growth (Allen & Seaman, 2006).

Adult learners are different from traditional college students. Many adult learners have responsibilities (e.g., families and jobs) and situations (e.g., transportation, childcare, domestic violence and the need to earn an income) that can interfere with the learning process. Most adults enter educational programs voluntarily and manage their classes around work and family responsibilities. Additionally, most adult learners are highly motivated and task-oriented (Merriam & Caffarella, 1999).

Adults have many challenges today, such as multiple careers, fewer stable social structures to rely on, living longer, and dealing with aging parents. The past is less helpful as a guide for living in the present. Adults are insecure in many decisions that they need to make. Life is complex due to career, family, and other personal choices.

Biological changes take place as individuals age, and it has been shown that memory decreases with age. It is memory that helps to form links between new and old information (Merriam & Caffarella, 1999). Short-term memory or working memory is limited to approximately five to nine bits of new
information at a time (Clark, 1999). The ability to perform chunking, or the grouping of associated concepts, is important for all students (Clark). Table 1 provides a summary of recommendations regarding the biological changes that may necessitate adaptations to the online learning environment.

Table 1
Recommendations for Online Course Development based on Characteristics of Adult Learners

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Adults may have some limitations and these should be considered in the design of the online environment.</td>
<td>a. Maintain large, easy to read fonts and clear, bold colors.</td>
</tr>
<tr>
<td></td>
<td>b. Use variety of graphics, images, and tables.</td>
</tr>
<tr>
<td></td>
<td>c. Ensure compliance with Americans with Disabilities Act and Federal 508 guidelines.</td>
</tr>
<tr>
<td></td>
<td>d. Use a clear menu structure.</td>
</tr>
<tr>
<td></td>
<td>e. Use a search and find function.</td>
</tr>
<tr>
<td></td>
<td>f. Provide practice with feedback and self tests.</td>
</tr>
<tr>
<td></td>
<td>g. Provide record keeping among sessions.</td>
</tr>
<tr>
<td></td>
<td>h. Provide frequent entry and exit points.</td>
</tr>
<tr>
<td></td>
<td>i. Be consistent if using a metaphor.</td>
</tr>
<tr>
<td></td>
<td>j. Provide a context sensitive help function.</td>
</tr>
<tr>
<td></td>
<td>k. Distinguish between temporary vs. permanent termination of the program.</td>
</tr>
<tr>
<td></td>
<td>l. Ensure there is no cultural bias.</td>
</tr>
<tr>
<td></td>
<td>m. Use graphic organizers, Venn diagrams, concept maps, and flowcharts.</td>
</tr>
<tr>
<td></td>
<td>n. Chunk information into 5-9 bits of information.</td>
</tr>
</tbody>
</table>

Learning styles are also important to consider, in that they determine how individuals approach learning tasks. There are many definitions of learning style. According to Felder (1996), "learning styles are characteristic strengths and preferences in the way [learners] take in and process information" (¶1). Silver, Strong, and Perini (1997) explained that learning styles relate to the different ways people think and feel as they solve problems, create products, and interact.

Learning style research is a complex field that has seen the growth of many models and numerous learning style inventories/tools. The field has developed in response to the desire of researchers and educators to know how students learn most efficiently. Lifelong learning may be enhanced if students are motivated to learn by understanding their learning style (Coffield, Moseley, Hall, & Ecclestone, 2004).
In their meta-analysis of 71 learning style inventories, Coffield et al. (2004) identified several problems common to learning style inventories: (a) lack of a unified, common definition of learning style, (b) weakness in reliability and validity research, (c) the classification or grouping of individuals using categories or dichotomies, and (d) the commercial gain that authors have sought through the sale of their instruments.

In spite of these weaknesses, there are many reasons why educators should continue to use such tests. They can help students develop increased self-awareness, and they provide an opportunity for students and instructors to engage in a discussion that may not have taken place otherwise. These tools foster a learner-centered approach to teaching and encourage diversity. Palloff and Pratt (2003) reported that "underlying learning style research is the belief that students learn best when they approach knowledge in ways they trust…. In other words, a ‘one size fits all’ approach will not work" (p. 31). Table 2 presents recommendations on incorporating learning styles in an online learning environment.

With the increasing number of adult students, interest in how adults learn continues to grow, and research continues in the area of adult learning theories. The next section of this article introduces learning theories with application to the adult learner.

Table 2
Learning Styles and the Characteristics of Adult Learners

| 2. Learning styles need to be considered. | a. Ensure that students can move through the instruction at their own pace. |
| In any group of adults there will be a wide range of individual differences, thus the individualization of learning experiences is important in many situations. | b. Ensure that the students can review previous learning whenever they want. |
| | c. Provides links to a wide variety of web resources. |
| | d. Ensure to allow ample time for students to master the content. |
| | e. Ensure that all learning styles are addressed by presenting material in multiple modes including text, graphics, audio and manipulatives. |
| | Use strategies such as consciousness raising, journal keeping, reflection logs, think sheets, guided questioning. |
LEARNING THEORIES

Gold (1999) and Reeves (1994) discussed the two major educational philosophies that have emerged in the last century. The instructivist and constructivist approaches to teaching and learning are considered to lie at either end of a continuum. Normally, educators choose an approach to teaching and learning that lies somewhere along this continuum. In an instructivist approach, the instructor sets performance objectives and develops a systematic approach to the learning content that is independent of the learner, while the constructivist philosophy places the emphasis on the learner and the learner’s interpretations through self-directed explorations. Learning theories have their basis in philosophy and psychology and provide the overall framework for teaching and learning activities (Merriam & Caffarella, 1999).

Learning is about change, and adult learning is also about change. "Adult learning theory helps faculty to understand their students and to design more meaningful learning experiences for them. There is not one adult learning theory that successfully applies to all adult learning environments" (Frey & Alman, 2003, p. 8).

There is no one theory that explains how adults learn, just as there is no one theory that explains all human learning. Existing theories provide frameworks or models, "each of which contributes something to our understanding of adults as learners" (Merriam & Caffarella, 1999, p. 271). Merriam and Caffarella reported that learning is a process (rather than an end product) and that the focus of theories is on what happens when real learning takes place. "Adult learning theory helps faculty to understand their students and to design more meaningful learning experiences for them. There is not one adult learning theory that successfully applies to all adult learning environments" (Frey & Alman, 2003, p. 8). Learning is about change, and adult learning is also about change.

The author developed a framework of 13 characteristics of adult learners to consider when designing online instruction. The first two characteristics have already been presented in this article. The remaining 11 characteristics are presented in the Appendix with specific teaching strategies and recommendations to consider when developing an online learning environment. Not every recommendation can be followed, but they form the basis of the author’s proposal to develop online training for adults. One must be
familiar with the way in which to design an online environment, understand the strengths as well as limitations that are inherent in this type of instructional medium, and balance that with information about how adults learn. The Appendix will be referred to throughout this section of the article.

Andragogy

Andragogy, a concept introduced by Malcolm Knowles in 1973, is learner-focused in nature. Andragogy is also grounded in humanistic learning theory (Merriam & Caffarella, 1999). This model has five assumptions to be considered in a formal learning environment.

First assumption. The first assumption underlying andragogy refers to adult learners’ independent self-concept and ability to direct their own learning (Knowles, 1989). Adult learners are autonomous, independent, and self-reliant, and they are self-directed toward goals. According to Fidishun (2000), adults with previous schooling have been constructed as "dependent" learners, and it is up to the educator to move students from their old habits, shape them into self-directed learners, and encourage them to start taking responsibility for their learning. See the Appendix, characteristic 3, for recommendations to assist adult learners in becoming actively involved in their own learning.

Furthermore, it is recognized that not all adults are self-directed and that some may need help to become more self-directed. Some students need some type of structure to assist them in becoming more self-directed. Doing this may cause some students to express negative opinions, especially students who would rather remain passive than to become actively involved in the learning process. These students should be given "short, directed, concrete online tasks that provide the most ‘learning for the experience’ to make these adults see the relevancy of online learning" (Fidishun, 2000, Section: Technology and the Assumptions of Andragogy, ¶5). Providing scaffolding will promote self-reliance and help the student to become more self-directed. See the Appendix, characteristic 4, for methods for the application of scaffolding support. Characteristic 5 also considers support for adult learners in the new learner-centered paradigm.

According to Lieb (1991), since adults tend to be autonomous and self-directed, they need to be free to direct themselves. To enable this to occur,
instructors should actively involve the participants in the learning process and be facilitators for this process. The instructor should only serve as a guide. However, the instructor needs to provide the appropriate framework to allow this growth to occur. See the Appendix for recommendations on how to encourage active, self-directed learning (characteristic 3) as well as on how to work as a facilitator of knowledge (characteristic 6).

**Second assumption.** The second assumption underlying andragogy is that "an adult accumulates a growing reservoir of experience, which is a rich resource for learning" (Merriam & Caffarella, 1999, p. 272). Cognitivist learning theory supports this concept. The second assumption is based on the need to attach instruction to relevant schemata, which are considered internal knowledge structures. Adult students can build on previous knowledge and experience by relating new information to past events and experience. Instructors should strive to get this information from students and should then relate students’ experiences to the concepts being learned. It is important for the instructor to recognize the value of experience (Knowles, 1989).

Fidishun (2000) stated that "adults want to use what they know and want to be acknowledged for having that knowledge" (Section: Technology and The Assumptions of Andragogy, ¶7). Kolb (1984) recognized that learning is a continuous process that is based in experience. "Learning is the process whereby knowledge is created through the transformation of experience" (Kolb, p. 38). Experiential learning is an active process that can be a powerful method for teaching adult learners. See the Appendix, characteristic 7, for recommendations that will enable instructors to relate new information to previous knowledge as well as to the learner’s experience.

Lieb (1991) maintained that accumulated life experiences and knowledge are related to work or to family responsibilities as well as to past education. Adults need to connect new knowledge to past events and experience. The instructor needs to get this information from the student and then relate it to the concepts being learned.

**Third assumption.** The third assumption of andragogy is that "the readiness of an adult to learn is closely related to the developmental tasks of his or her social role" (Merriam & Caffarella, 1999, p. 272). Merriam (2001) stated that learning needs should be closely related to changing social roles. Lieb (1991) suggested that adult students are goal oriented; thus, objectives and
goals should be outlined early in a course. Adult students usually know what they want to learn, and they like to see the program organized toward their personal goals (Knowles, 1989). Lieb also believed that adults are relevancy oriented. They want to see a reason for learning something, and learning should be applicable to work or home. See the Appendix, characteristic 8, for recommendations that will enable instructors to improve the relevancy of content to student needs.

**Fourth assumption.** The fourth assumption of andragogy is that "there is a change in time perspective as people mature—from future application of knowledge to immediacy of application. Thus an adult is more problem-centered than subject-centered in learning" (Merriam & Caffarella, 1999, p. 272). Learners need to know why they should learn something and how it will benefit them (Knowles, 1989). The instructor should ask the online student to do "some reflection on what they expect to learn, how they might use it in the future or how it will help them to meet their goals" (Fidishun, 2000, Section Technology and the Assumptions of Andragogy, para. 2). Lieb (1991) believed that adults are practical and need to focus on what is important to them. It is vital that the instructor makes the coursework relevant. The adult learner believes that he or she is being prepared for tasks and responsibilities that are more challenging or complex than current tasks. See the Appendix, characteristic 9, for methods for incorporating problem-centered learning in the online classroom.

**Fifth assumption.** The fifth assumption of andragogy is that "adults are motivated to learn by internal factors rather than external ones" (Merriam & Caffarella, 1999, p. 272). Some factors that motivate adults include the promise of increased job satisfaction, self-esteem, and quality of life. According to Fidishun (2000), this can be built into the online environment in several ways. See the Appendix, characteristic 10, for methods that will help motivate adult learners.

Lieb (1991) reported that respect should be shown to all students, no matter what age. Adults respond positively when the learning environment is comfortable and safe. See the Appendix, characteristic 11, for methods of developing a climate that is collaborative, respectful, mutual, and informal.

Lieb (1991) added that self-reflection is important for the adult learner. The instructor should provide a space for the learner in an online course that permits carefully guided reflection about his or her performance of new
competencies. See the Appendix, characteristic 12, for methods to encourage learner self-reflection on the learning process.

**Criticisms and Concerns Regarding Andragogy**

According to Brookfield (1995), it is still not very clear how adults learn. Current learning theory does not address all aspects of how adults learn. Everyone is different and is shaped by his or her history. Many variables influence how individuals develop as adults. Educators need to consider culture, physiology, cognitive style, learning style, and personality as they develop the online learning environment for adults. To do this, educators must be prepared to learn from their students and listen to them. The students will teach the educator what he or she needs to know in order to develop course material.

Merriam (2001) and Merriam and Caffarella (1999) added that there has been a debate as to whether the assumptions of andragogy are principles of good practice rather than a theory, as andragogy primarily describes what the adult learner may be like. In fact, Merriam stated, "Knowles himself came to concur that andragogy is less a theory of adult learning than 'a model of assumptions about learning or a conceptual framework that serves as a basis for an emergent theory'" (p. 5). Knowles eventually represented these assumptions on a continuum "ranging from teacher-directed to student-centered learning" (Merriam, p. 6). Adults' dependence on the instructor is based on their previous levels of knowledge of the topic. If they have limited knowledge, they will depend on the instructor more.

Another concern related to Knowles’ theory is that it does not consider the context of learning. It is important to remember that each learner is unique. Characteristics related to culture, life experiences, and gender may be more important to learning than the fact that a learner is considered an "adult."

Pratt (1993) concluded that "while andragogy may have contributed to our understanding of adults as learners, it has done little to expand or clarify our understanding of the process of learning, 'nor has it achieved the status of a theory of adults learning'" (p. 21). Smith (2002) pointed out that Knowles’ concept of andragogy is a beginning attempt to try to build a theory (or model) of adult learning, and that it "is anchored in the characteristics of
adult learners" (p. 3). Smith also noted that Knowles’ theory uses a model of relationships from humanistic clinical psychology. However, Knowles also built on behaviorist theory by encouraging the learner to "identify needs, set objectives, enter learning contracts…" (para. 4). Knowles’ andragogy draws from two opposing traditions: behaviorism and humanism.

Andragogy is not perfect, but it represents an attempt to understand the difference between adult and childhood learning. It has several weaknesses; for instance, it has tended to ignore issues of power and social justice, in society and in the educational process; the need for critical reflection as a necessary component of an adult learning process; the crucial place of dialogue and discussion as means for learning; and a recognition of multiple ways of knowing and learning. (Schapiro, 2003, p. 152)

Andragogy does not give the total picture of how adults learn. Due to these identified limitations in Knowles’ theory of andragogy, the author is going to discuss three other research areas that have been proposed to represent adult learning. The author feels that these theories are important for the development of appropriate adult online educational programs and should be considered by educators as they work with adult learners.

**Adult Learning Theories Related to Andragogy**

**Experiential learning.** Experiential learning is a concept central to andragogy. Experiential learning is composed of three components: (a) knowledge of concepts, facts, information, and experience; (b) prior knowledge applied to current, ongoing events; and (c) reflection with a thoughtful analysis and assessment of learners’ activity that contributes to personal growth. These concepts are crucial to experiential learning, and they should provide the basis of any adult learning experience. Brookfield (1995) agreed on the importance of experience for adult learning. According to Brookfield, the notion "that adult teaching should be grounded in adults’ experiences, and that these experiences represent a valuable resource, is currently cited as crucial by adult educators of every conceivable ideological hue" (para. 1).
According to Merriam and Caffarella (1999), "experiences that provide learning are never just isolated events in time. Rather, learners must connect what they have learned from current experiences to those in the past as well as see possible future implications" (p. 223). Teaching of adults should be grounded in the learners’ experiences; it should allow adult learners to connect what they have learned to experiences in the past, so that they can see possible future implications.

The reader is referred to the Appendix, characteristic 11, for recommendations regarding the development of the correct atmosphere for adult learners. Experiential learning considers experience; see the Appendix, characteristic 7, for recommendations for implementing this aspect. Recommendations for interaction and collaboration (characteristics 12 and 13) are also presented in the Appendix. These are needed by adult students so that they can draw on each others’ experience.

**Self-directed learning.** Self-directed learning, another central concept in adult education, suggests that the locus of control in learning lies with the adult learner, who may initiate learning with or without assistance from others (Lowry, 1989). Some learners need varying degrees of direction and support, while others are ready to be self-directed. Characteristics of self-directed learners include independence, willingness to take initiative, persistence in learning, self-discipline, self-confidence, and the desire to learn more. They are able to organize time, develop plans for completion, enjoy learning, and remain goal-oriented. Self-directed learning has been confined to the informal learning situation until recently. Before the 1980s, learning was believed to occur only in a formal institution. Researchers now realize that self-directed learning is worthwhile as well as possible, and educators should encourage this type of learning in the formal classroom (Merriam & Caffarella, 1999).

Self-directed learning underlies Knowles’ andragogy. The theory of andragogy acknowledges that as a person grows and matures, his or her self-concept changes from that of a dependent personality toward that of a self-directed individual. Older methods of teaching did not foster self-directed learning and were primarily teacher-centered and passive. These methods of education may be difficult habits for older students to break, since they reflect the way in which they were taught. These students need to be guided as they progress toward self-direction to take more responsibility for their own learning.
Refer to the Appendix for recommendations to assist learners in becoming self-directed learners. Characteristic 4 pertains to the provision of scaffolding, and characteristic 3 addresses methods to get students to become active participants in the learning process. Instructors should provide some support for students as they grow into self-directed learners and include tasks that let the students use their knowledge and experience (characteristics 7 and 8 in the Appendix).

**Transformative learning theory.** Transformative learning, which is considered a constructivist theory of adult learning, was strongly influenced by the work of Jack Mezirow (1997). Mezirow proposed that individual transformation includes a change in one’s frame of reference or way of seeing the world. According to Palloff and Pratt (1999), "the goal of transformative learning is to understand why we see the world the way we do and to shake off the constraints of the limiting perspectives we have carried with us into the learning experience" (p. 129). Transformative learning helps adult learners understand their experiences, how they make sense or "meaning of their experiences, the nature of the structures that influence the way they construe experience, the dynamics involved in modifying meanings, and the way the structures of meaning themselves undergo changes when learners find them to be dysfunctional" (Mezirow, p. xii).

Frey and Alman (2003) stated that transformative learning is a process of critical reflection. It is about change in learners, and it is the kind of learning that occurs when individuals make meaning out of the world through experiences. The goal of this learning theory is to enable the adult learner to "become a more autonomous thinker by learning to negotiate his or her own values, meanings, and purposes rather than to uncritically act on those of others" (Mezirow, 1997, p. 11). This type of learning involves learning about one’s personal life. The reader is referred to the Appendix, characteristic 12, for methods that an instructor can use to foster transformative learning. Characteristic 3 (active learning) and characteristic 4 (scaffolding and support) are important for self-directed learning. Learners need support to begin the process, and they must be actively involved as they incorporate new information into the old.

**SUMMARY OF THE CHARACTERISTICS OF ADULT LEARNING THEORIES**

The compilation of recommendations for the design of the online learning environment for adults is based on the theories presented in this article.
These theories provide a foundation for organizing current knowledge. The framework in the Appendix integrates the theories with recommendations for the design of an online learning program for adult learners. The compilation of recommendations combines every theory presented in this article. In the framework, each theory presented incorporates separate components of the characteristics of adult learners. There is no theory that uses all of the characteristics developed by the author. Knowles’ theory of andragogy, which considers characteristics 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12, is the most comprehensive.

The biology of adults (characteristic 1) and learning styles (characteristic 2) are not included in any theory reviewed by this author. The biology of aging and learning styles both contribute to the individuality of the adult learner. One’s biology and learning style is influenced by culture, cognitive style, physiology, and personality. All of these influences create the unique people who are today’s adult learners. The consideration of the individuality of each person is critical to teaching adults.

Experiential learning only considers characteristics 7, 11, 12, and 13. Self-directed learning theory considers characteristics 3, 4, and 7. Transformative learning theory considers characteristics 3, 4, and 12. These theories are not comprehensive and should only be considered as components of adult learning theory. There is no single comprehensive theory that addresses all of adult learning. All of the characteristics in the table should be considered when developing an online learning environment for adult learners.

CONCLUSION

This article has reviewed several aspects of adult learning, especially in relation to the online learning environment. Several learning theories have been discussed, and recommendations have been presented for instructors who teach adults using an online medium. It has become clear that there is not one theory that can explain how adults learn. There are many theories; each is compelling, and each has its own strengths and weaknesses. The primary theme that has emerged is the following: Everyone is different, and each person is an individual. Adult learners are diverse and have their own histories to consider.

Andragogy and the other theories presented in this article all have something to offer instructors of distance or online learning. These theories emphasize
self-direction, flexibility, and the process of learning, rather than the content. They are learner-centered and recognize the importance of a customized approach to learning. They also focus on the fact that adults are different from children. Adults have experience and are self-directed and independent, yet they are all different. Instructors need to consider the context of learning and understand that culture and society shape the adult learner and add to his or her individuality.

The primary consideration of instructors as they design online learning environments should be that each learner is a unique being. Learners are real people with distinct needs. Understanding adult learning theories is also important, as is being able to change and accept change in a dynamic learning environment. The instructor needs to be open and honest with each student and respect each person as an individual who has experience that may be valuable to the classroom.

Another theme discovered in all of these learning theories is that adult learning is about change. The instructor needs to acknowledge that he or she may be a change agent and appreciate that adult students are undergoing transformations as they go through the learning process. Supporting learners as they go through these changes and allowing and helping reflection require the instructor to act as a facilitator rather than a lecturer, allowing students to experience discovery as part of the learning process.

Research continues to be done about how adult learners learn. There is research regarding how adults may use the online learning environment as well as the methods that facilitate learning in adult students. The future of adult online learning research may be based on the theories discussed in this article, even though most of these theories were developed almost 20 years ago and in traditional classroom environments. The online environment did not exist 20 years ago, and yet the universal nature of the theories enables educators to consider them for the online environment.

All of these approaches to learning can help develop the understanding of adult learning in several ways. First, the adult learner should be seen as a whole person and should be considered as more than a processor of cognitive information. He or she comes with a mind, memories, conscious and subconscious worlds, feelings, beliefs, imagination, and a physical body, all of which can relate to new learning. It is imperative that educators understand that culture and society influence each individual differently. Second, the learning process is more than the organized acquisition and storage of new information. The learning process involves learning about oneself and
transforming not just what one learns, but also the way in which one learns. It is also about sensing, visualizing, perceiving, and learning informally with others. Interaction and collaboration should occur in the learning environment to facilitate adult learning.

Online learning will continue to grow in importance for adult learners. The challenge for educators is to learn how to provide a positive "social" environment using an electronic medium. Technology will continue to change as new technologies are developed. Instructors will need to adapt, change, and continue to learn about how this "electronic" environment can be used to foster a social atmosphere, and they will need to recognize their role as change agents.

References


Recommendations for Online Course Development based on Characteristics of Adult Learners (Starting with characteristic 3)

3. Adults need to be actively involved in the learning process.

a. Encourage learners to identify resources and devise strategies for using resources to achieve objectives.
b. Encourage learners to formulate their learning objectives, giving them more control over their learning. It is important for the instructor to discover what the participants need or want to learn.
c. Provide regular, consistent communication to individual learners and groups.
d. Teach inquiry skills, decision-making, personal development, and self-evaluation of work.
e. Make regular announcements or updates and establish regular online office hours.
f. Assure learners that discussion board postings are being read.
g. Increase interactions with embedded practice and feedback sequences.
h. Embed content in authentic contexts if technology allows.
i. Require learners to synthesize and problem solve, using the information in new ways.
j. Have learners manipulate objects on the screen if appropriate.
k. Develop peer-learning groups.
l. Periodically review goals. Have students reflect and discuss.
m. Provide students with multiple resources of information that include differing viewpoints from diverse authors.
n. Acknowledge the accumulated experiences of the participants as valuable educational resources.
o. Use learning contracts, group projects, role playing, case studies and simulations to enhance self-direction.
p. Use hyperlinks to allow students to develop their own path. If they know the topic, they can skip it.
q. Provide flexibility in assignments that allow students to work ahead.
r. Divide learning into small manageable units or subunits that can be completed in relatively short amounts of time for logical stopping and starting points.
s. Allow learner choice of assignments, projects, or research topics (consider learning contract).
t. Encourage and reinforce self sufficiency through timely feedback.
u. Develop a student portfolio or personal scrapbook
v. Incorporate text signals such as "this is a long unit," "this is very important content," "proceed to lesson six."

4. Adults need scaffolding to be provided by the instructor. Scaffolding should promote self-reliance, and it should allow learners to perform activities they were unable to perform without this support.

a. Provide learner support after the initial training in the form of coaching, study teams, and opportunities to learn, by watching his/her colleagues perform.
b. Coach using audio files or other method to help in performance of a task.
c. Encourage students to articulate problems.
d. Provide resources to assist students to complete tasks.
e. Provide examples of complete problems.
f. Provide multiple scenarios, events, and perspectives to help students develop decisions and plans.
g. Provide consistency among courses.
5. Adults have a pre-existing learning history and will need support to work in the new learner-centered paradigm. a. Encourage all students to post responses to questions, read other comments, and reflect using tools such as threaded discussions.
b. Encourage learners to share with other students their derivation of meaning and their progress through discussion postings, reflection papers that are posted, or email.
c. Hold debates, create multifaceted projects with deadlines for public display, introduce surprise, suspense, and disorder in the midst of routine and ritual. Ask learners to link ideas to other subjects.
d. Recognize that it is important to "unlearn" old beliefs and allow learners time to work through conflict.

6. Adults need the instructor acting as a facilitator. a. Plan the course environment to allow participants responsibility for leadership and group presentations.
b. Summarize key points of units and discussions for closure.
c. Use questioning techniques to provoke thinking, stimulate recall, and challenge beliefs.
d. Understand that some adults may feel intimidated and that their egos are on the line when they risk trying something new or unique.
e. Use participants experience, protect minority opinions, keep disagreements civil, and make connections between the opinions and ideas presented by the students.
f. Display student work.
7. Adults need consideration of their prior experience. The instructor should acknowledge this prior experience. Adults need to connect new knowledge to past events. 

- Do a needs assessment and a student self-assessment prior to class starting. Relate this information to the class. Recognize the value of experience.
- Include tasks that let the participants use their knowledge and experience.
- Tell why the topic or link is important.
- Provide practical information with examples.
- Link new topics to what has been discussed or read.
- Open the class with introductions that include personal and professional background. Instructor should do the same.
- Involve learners in diagnosing their own needs.

8. Adults need to see the link between what they are learning and how it will apply to their lives. They want to apply immediately their new knowledge. They are problem-centered.

- Incorporate activities in assignments that students can relate to, such as real situations or events.
- Include opportunities for solving problems in groups.
- Ensure that assignments reflect the maturity level of the adult learners.
- Encourage students to apply their life and work experiences to learning.

9. Adults need to feel that learning focuses on issues that directly concern them and want to know what they are going to learn, how the learning will be conducted, and why it is important. The course should be learner-centered vs. teacher-centered.

- Ensure that students write their course goals in the beginning of the course so they can relate the course goals with their current needs and issues.
- Explain how the course information will be of use to the learners.
- Provide enough flexibility to allow student's input on issues that may be addressed by the
whole class.
d. Provide models of 'best practice' behavior to let students know what they are doing compared to a known model.
e. Maintain consistent guidelines during the course.
f. Involve learners in diagnosing their needs to help trigger internal motivation.

10. Adults need to test their learning as they go along, rather than receive background theory.

a. Apply concepts to tasks or problems.
b. Set the level of difficulty at the correct level. It should challenge but not be too challenging which could frustrate the learners.
c. Set rewards for success.

11. Adult learning requires a climate that is collaborative, respectful, mutual, and informal.

a. Allow the learner to voice his or her own opinion and treat him or her as equal in the learning process.
b. Individuals have many perspectives and bring these to the classroom; these may be a result of their religion, gender, ethnicity, class, age, sexuality, and/or physical abilities. Acknowledge these.
c. Provide an open environment so that the students are allowed to disagree with the instructor. Not all learners bring the same ability to think critically, analyze results, etc. Plan accordingly.
d. Establish an environment that learners feel safe and comfortable in expressing themselves and feel respected for their views.
e. Help students with similar interests find each other.
f. Know when to pull back in a discussion and let the students go.
g. Keep up with the discussion postings, and act as a summarizer, reflector, and source of external help if the group fails.

h. Recognize learner’s individual talents and contributions.

12. Adults need to self-reflect on the learning process and be given support for transformational learning.

a. Provide a place in the course to discuss the process of learning online which may include thoughts on how they are managing in the online course.

b. Allow students to discuss options for their new roles, plan action strategies and exchange of knowledge and skills for effective and efficient online learning.

c. Provide ways for learners to engage in metacognitive reflection. Students may benefit from the use of think logs, reflective journals, and group discussions within a cooperative learning setting.

13. Adults need dialogue and social interaction must be provided. They need to collaborate with other students.

a. Allow students to introduce themselves, develop a personal web page, and provide an area that students can feel free to discuss their experiences.

b. Problem-based or case-based learning activities that are done in collaborative work groups.

c. Use cooperative and collaborative learning structures such as learning partnerships, to equalize the power relationships in groups and encourage a shared leadership.

d. Incorporate multiple methods of feedback in course.

e. Grade assignments with specific, stated criteria, such as a rubric.

f. Encourage shared leadership.
MANUAL FOR TRAINING OF TRAINERS ON HUMAN DEVELOPMENT

PART II

Dr. Arabinda Ghosh
Joint Director

Administrative Training Institute
Government of West Bengal

Planning Commission – UNDP sponsored project
“Strengthening State Plans for Human Development”
MANUAL FOR TRAINING OF TRAINERS ON HUMAN DEVELOPMENT

PART – II

Training Technique

Issues on Human Development

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PREFACE

Human Development (HD) has, in recent times, replaced economic growth (EG) as the central objective of human activity. It has been defined as enlarging people’s choices in a way which enables them to lead a longer, healthier and fuller life. Economic growth is considered potentially a very important instrument for advancing it. While EG fulfils the necessary condition for HD, if distribution of income is unequal and if social expenditures are low or distributed unevenly, the quality of life may not improve significantly, despite rapid growth of gross national product (GNP). There is no automatic mechanism interlinking EG and HD. While some developing countries have been very successful in managing growth to improve human conditions, others are less so. Advances in HD can make a critical contribution to EG. Thus, improved health and increased life expectancy raise the returns for all types of investment. Higher levels of HD, besides being an end in themselves, affect the economy by enhancing people’s capabilities and consequently their creativity and productivity. Health and education status of a population represent one of the main determinants of the composition and growth of output and exports.

According to the UNDP’s Global Human Development Report (HDR) 2007-08, in spite of the absolute value of the human development index (HDI) for India improving from 0.577 in 2000 to 0.619 in 2005, the relative ranking of India has not changed much. The HDI rank indicates that the country has done better in terms of per capita income than in other components of human development. The other indicators related to Health and Education reinforce this and highlight the need for greater focus on this area in our planning for development. It is this concern that is reflected in the Eleventh Plan which seeks to reduce not only poverty but also the various kinds of disparities across regions and communities by ensuring better access not only to basic physical infrastructure but also to health and education services for all. In consonance with the commitment to faster social sector development under the National Common Minimum Programme (NCMP), the Government of India has launched new initiatives.

The benefits of such enhanced expenditure largely depend on the proper implementation of the programmes with a human face. The performance of these initiatives, be it poverty, health or education related, reinforce one another. While sensitising the policy makers at the national and sub-national level for designing development plans with a human face is extremely important, the sensitisation of the implementers at the grass root level is also crucial.

In view of India’s commitment to Millennium Development Goals (MDGs), it is imperative to train development managers and implementers at all levels of government not only to understand the conceptual underpinnings of human development but also for discussing ways and means of operationalising it on the ground.

Responding to this need, UNDP (India) and the Planning Commission requested the Administrative Training Institute, West Bengal, to develop a training module on Human Development.

This module has two parts. Part-I is a journey through the important issues highlighted in the Human Development Reports since 1990. Further, Participatory Learning and Action is an important tool for formulating a participatory development plan to which participants get an exposure.
Part-II starts with Training Techniques covering the concept of Andragogy, how trainees learn, the concepts of feedback and Experiential Learning. It deals with the technique of preparing and conducting interactive sessions, how to lead a discussion and how to run group exercises. We acknowledge the extensive use of training material developed by Department of Personnel & Training (DOPT), Government of India, under its Trainer Development Programme.

This is followed by various aspects of Human Development. Module-1 discusses the common characteristics of an underdeveloped economy, unfolds the concept of human development, discusses issues relating to economic growth and human development. Module-2 discusses four pillars of Human Development and depicts the journey from concepts and analysis to action. Module-3 explains Human Development Index (HDI), Gender related Development Index (GDI), Gender Empowerment Measure (GEM) and Human Poverty Index (HPI). Module-4 states the innovations in calculating indices and highlights various statistical challenges pertaining to social sector. Module-5 elaborates the poverty scenario in India and integrates the concept of HD with poverty. Module-6 explains how public spending on HD can be designed and monitored. Module-7 explains how the process of HD is incomplete without gender equality and elaborates on various forms of gender inequality. Module-8 discusses the role of people’s participation in HD through a case. Module-9 deals with acquiring skill for decision-making by consensus and collaboration through group exercise.

The entire material has been prepared by West Bengal government’s only Master Trainer accredited by the DOPT, Dr. Arabinda Ghosh, Joint Director in the ATI, who has the added distinction of being an economist whose research is widely appreciated in international fora. For optimising the effectiveness of the training handbook, he innovated the idea of making the first part available in the distance learning mode.

A test-run of the handbook was conducted in the ATI with trainers drawn from across the country and participants from UN agencies and the RBI. Following this validation, the material has been given final shape and is now being published under the auspices of the Planning Commission and the UNDP (India).

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Additional Chief Secretary
Development and Planning Department
&
Director, ATI
P & AR Department
Government of West Bengal
CONTENTS

Part - I

Understanding Participation
Participatory Learning & Action

Part - II

Course Guide 1
Process Sheet 4
Presentation Slides 14
Training Technique 1A: Concept of Andragogy 45
Training Technique 1B: How Trainees Learn 49
Training Technique 1C: Concept of Feedback 60
Training Technique 2: How To Prepare & Conduct an Interactive Session 65
Training Technique 3: How To Lead a Discussion: Case Study as a Tool 81
Training Technique 4: Experimental Learning & How to run Group Exercises 100
Module 1: Introduction to Human Development 115
Module 2: The Human Development Approach 130
Module 3: Measuring Human Development 139
Module 4: Innovations in Measuring Human Development 146
Module 5: Poverty & Human Development 151
Module 6: Financing Human Development 172
Module 7: Gender & Human Development 175
Module 8: People's Participation for Human Development 195
Module 9A: Development of Collaboration – Principles Game 207
Module 9B: Decision By Consensus – Lost At Sea 212

Final Proof
INTRODUCTION

The human development approach advocates a shift in the development discourse, moving away from the conventional exclusive focus on economic growth towards a multi-dimensional approach that integrates education, health and income as a comprehensive development strategy. The concept stresses on the notions of sustainability, equity and empowerment and is about creating an environment in which people can realise their full potential and lead productive and creative lives in accord with their needs.

National policies focusing on the physical aspects of development no longer seem to attain national objectives such as “justice, social, economic and political”, as laid down in the Preamble to the Indian Constitution, for instance. India’s Eleventh Five year plan places considerable emphasis on human development and has accordingly set out national goals for various human development parameters as also state specific goals for poverty reduction. India’s Eleventh Plan have striking resonance with the Millennium Development Goals (MDGs) that have been agreed upon by the world community at the Millennium Session of the General Assembly in September 2000.

Global HDRs, since their inception in 1990 have played a key role in codifying and advocating the human development concept and emphasizing the urgency of operationalising human development through focused public action. National and sub-national HDRs have carried this agenda further to translate advocacy into action. India has been at the forefront of human development reporting, with support from the Planning Commission, Government of India and UNDP.

In view of India’s commitment to the Eleventh Plan goals and the Millennium Development Goals (MDGs), it would be critical to train development managers and implementers at all levels of government to not only understand the conceptual underpinnings of human development but also discuss ways and means of operationalising it on the ground. Responding to this need, the Human Development Resource Centre (HDRC) and the Public Policy and Local Governance (PPLG) Division of UNDP in collaboration with the Department of Personnel and Training (DoPT), Ministry of Personnel, Public Grievances and Pensions and Administration Training Institute, West Bengal have developed training modules for human development.

The course has been designed to enable participants to:

- Explain the basic theory of human development, including indexing and other measurement issues, gender, human security, economic factors influencing human development.
- Address the specificities of human development in the Indian context including operational issues such as financing, programme design and evaluation, and policy analysis.
- Evaluate and apply appropriate theoretical perspectives to issues in human development.
- Discuss specific mechanisms that aid in successful promotion of human development – advocacy and propaganda strategies (like HDRs, ICTs).
- Familiarise themselves with global debates and best practices on human development.
DESIGNED FOR

The training on human development is oriented at development practitioners (planners and implementers) in the design of social policies and the implementation and management of social programmes. Participants will typically be from ministries and Panchayati Raj Institutions (PRIs) engaged in (decentralised) policy planning and implementation.

COURSE STRUCTURE

The course has three distinct features, each helping participants to develop their skills and understanding of Human Development.

1. Distance Learning: This provides an opportunity to have a journey through the important issues highlighted in the Human Development Reports since 1990. This will help the participants develop the concept of Human Development. Participatory Learning and Action is an important tool for formulating a participatory development plan. The participants will get an exposure to Participatory Learning and Action.

2. Human Development workshop: Run for a period of one week. Apart from discussion on the various aspects of Human Development this workshop includes case studies, exercises and films. This workshop provides an opportunity to strengthen the concept of Human Development and skill on measuring it.

3. Human Development Project: On completion of workshop, each participant will undertake a personal Human Development Project with a suitable client organisation. This project will provide them with an opportunity to apply the knowledge and skill acquired during the workshop. This will be carried out over a period of 4 weeks and a project report submitted for assessment.

TRAINING OF TRAINERS:

In order to conduct this training course, we need to develop considerable number of trainers in our country. The course structure as mentioned above will be followed. In addition, there will be modules on training techniques.

A programme schedule of the Training of Trainers Workshop on Human Development is shown below.

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<th>DAY ONE</th>
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## Training of Trainers on Human Development Course Guide

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<td>* Recap of previous day</td>
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<td>* Measuring Human Development (Module - 3)</td>
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<tr>
<td>1 hour</td>
<td>* Innovations in Measuring HD (Module - 4)</td>
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<td>* Poverty &amp; Human Development (Module - 5)</td>
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### DAY THREE

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<td>* Prepare and conduct an interactive session (Module - TT-2)</td>
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<td>1 hour 30 minutes</td>
<td>* Financing of Human Development (Module - 6)</td>
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<td>2 hours</td>
<td>* Gender &amp; Human Development (Module - 7)</td>
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<td>* Micro lab on Practising Interactive session</td>
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<td>* How to lead a discussion (Module - TT-3)</td>
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### DAY FIVE

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<td>* People’s Participation for Human Development (Module 8)</td>
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<tr>
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<td>* Group Exercise: (Module - 9)</td>
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<td>- Decision by consensus</td>
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<td># Lost at Sea</td>
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<td>- Development of Collaboration</td>
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<td></td>
<td># Principles Game-Inter group Collaboration</td>
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<td>1 hour</td>
<td>* Project finalisation &amp; Validation</td>
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**TT - Training Technique**
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<th>Content/Activity</th>
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<td><strong>Sharing and Course Briefing</strong></td>
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<td>Exercise</td>
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<td>Participants may be divided into three teams.</td>
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**Topic: Introduction to Human Development (Module-1)**

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**Topic: The Human Development Approach (Module-2)**

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<td>Lecture</td>
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<td>5mts</td>
<td>Lecture</td>
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<td>5mts</td>
<td>Discussion</td>
<td>PPT198</td>
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<tr>
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<td>15mts</td>
<td>Discussion</td>
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<td>Content/Activity</td>
<td>Remarks</td>
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</tr>
<tr>
<td>30 mts</td>
<td>Review of previous day</td>
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</tr>
<tr>
<td>3 hrs</td>
<td>Micro Lab on Practising Interactive session</td>
<td>Distribution of Session Feedback Form.</td>
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</table>

<table>
<thead>
<tr>
<th>S No</th>
<th>Interactive Session by</th>
<th>Main Observer</th>
</tr>
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<tbody>
<tr>
<td>1</td>
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</tr>
<tr>
<td>2</td>
<td></td>
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<tr>
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<tr>
<td>5</td>
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<td></td>
</tr>
<tr>
<td>6</td>
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</table>

Total Duration 25 mts x 6 = 2 Hrs 30 mts

Interactive Session - 20 min
Feedback - 5 min

Review and Summary of Interactive Session = 30 mts
<table>
<thead>
<tr>
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<th>Time</th>
<th>Method</th>
<th>Media</th>
<th>Content/Activity</th>
<th>Remarks</th>
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<td>30mts</td>
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<tr>
<td>10mts</td>
<td>Lecture</td>
<td>PPT 199-200</td>
<td>Introduction</td>
<td>Purpose of Discussion</td>
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<td>Discussion</td>
<td>PPT 201-203</td>
<td>Factors Influencing Discussion</td>
<td>Discussion Behaviours</td>
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<td>20mts</td>
<td>Lecture</td>
<td>PPT 204-208</td>
<td>Questions</td>
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<td>Preparing to Lead a Discussion</td>
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<tr>
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<td>Lecture</td>
<td>PPT 211</td>
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<td>20mts</td>
<td>Lecture</td>
<td>PPT 212-215</td>
<td>How to Lead a Case</td>
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<td>Discussion</td>
<td>PPT 216</td>
<td>Summing Up</td>
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<td>45mts</td>
<td>Case Study</td>
<td></td>
<td>Run the Case</td>
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</tr>
<tr>
<td>15mts</td>
<td>Discussion</td>
<td></td>
<td>Summing up the Discussion on the Case Study</td>
<td>The material regarding the CASE STUDY is to be distributed in advance.</td>
<td></td>
</tr>
<tr>
<td>Total Duration</td>
<td>Time</td>
<td>Method</td>
<td>Media</td>
<td>Content/Activity</td>
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<tr>
<td>30mts</td>
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<td></td>
<td></td>
<td>Recapitulation of Previous 4 Days' Learning</td>
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</table>

**Topic: People's Participation for Human Development (Module-8)**

<table>
<thead>
<tr>
<th>1hr 30mts</th>
<th></th>
<th>Discussion</th>
<th></th>
<th>Discussion on Distance Learning Material on Understanding Participation &amp; PLA</th>
<th>Participants will be asked to give response to the questions as mentioned in the exercise individually in successive orders.</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>30mts</td>
<td></td>
<td></td>
<td>Run the case on Beyond PRA</td>
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<tr>
<td></td>
<td>15mts</td>
<td>Discussion</td>
<td></td>
<td>Conclusion</td>
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</table>

**Topic Group Exercise (Module - 9 & Training Technique 4)**

<table>
<thead>
<tr>
<th>3hrs</th>
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<th>PPT 217-219</th>
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<th>Advantages, Purpose of Group Exercise Experiential Learning &amp; Learning from Group Exercise</th>
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<tbody>
<tr>
<td></td>
<td>1hr</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>30mts</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>60mts</td>
<td>Exercise</td>
<td></td>
<td>Principles Game-Briefing</td>
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<td></td>
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<td>Run</td>
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<td></td>
<td>Principles Game-Debriefing</td>
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<tr>
<td></td>
<td>60mts</td>
<td>Exercise</td>
<td></td>
<td>Lost at Sea-Briefing</td>
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<td>Run</td>
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<td></td>
<td></td>
<td>Lost at Sea-Debriefing</td>
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<tr>
<td></td>
<td>1hr</td>
<td></td>
<td></td>
<td>Project Finalisation</td>
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<td></td>
<td></td>
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<td></td>
<td>Validation</td>
<td></td>
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</table>
The basic purpose of development is to enlarge people's choices. In principle, these choices can be infinite and can change over time. People often value achievements that do not show up at all, or not immediately, in income or growth figures: greater access to knowledge, better nutrition and health services, more secure livelihoods, security against crime and physical violence, satisfying leisure hours, political and cultural freedoms, and sense of participation in community activities. The objective of development is to create an enabling environment for people to enjoy long, healthy and creative lives.

Mahbub ul Haq

Human Development defined

Conceived as an alternative to purely economic development by emphasizing the diversity of human needs.

Human Development is defined as the process of enlarging the range of people's choices:

- focuses on the ends rather than the means of 'development' and progress.
- denotes both the process of widening people's choices and the level of their achieved well-being.
- distinguishes between two sides: One is the formation of human capabilities, the other is the use that people make of their acquired capabilities, for work or leisure.
What does HD say...

• The true wealth of a country is its people.
• There are not developed and underdeveloped countries, but developed and underdeveloped people.
• The basic purpose of development is to enlarge people's choices to lead lives that they value. Income is one aspect of life that people enjoy, cherish and value. Others are self-respect, dignity, a sense of belonging to a community, etc.

What does HD say...

• Human well-being is the purpose, the end, of development.
• HD about not just “what” to do, but “how” and for whom” - not doing different things but doing them differently- emphasis from “are we doing things right” to “are we doing the right things”

Four Pillars of HD

• Efficiency: Efficient use of resources. HD is pro-growth and productivity.
• Equity: Distributive justice, especially for choices and opportunities
• Freedom and Empowerment. Possibility of choosing. Sen: Freedom has a constitutive value (value by itself) and an instrumental value (as a means to efficiency and to equity)
• Sustainability not just for present generation but next ones too

Economic growth and HD

• Economic growth is understood as the increase in a country’s per capita income
• But:
  - There is no automatic link between high GNP growth and progress in human development
  - There are choices or functionings that do not depend on the level of income.
  - Income’s contribution to satisfaction of human needs decreases as income increases (Principle of decreasing marginal utility)

Economic growth and HD

- Total products or income don’t only include goods and services but also wrongs, such as drugs and arms production.
- Per capital income does not take into account distribution between rich and poor, unevenly distributed
- Income expansion does not automatically lead to an expansion of all choices
- Growth can be ruthless, rootless, futureless, voiceless and jobless

Economic growth and HD

• Comparing GDP per capita and HDI can reveal much about national policy choices and priorities. There are countries with high GDP but low HD and vice versa.
  - High HD and Low GNP - Sri Lanka
  - Low HD and High GNP - Venezuela

Table: Global Income Disparity between the Richest and Poorest 20 Percent of selected countries during 1998-2002

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Percent 20%</th>
<th>Percent 40%</th>
<th>Percent 60%</th>
<th>Percent 80%</th>
<th>Percent 90%</th>
<th>Percent 95%</th>
<th>Percent 99%</th>
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<td>Argentina</td>
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<td>56.4</td>
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Introduction to the concept of HD

Economics and Welfare
- Is Human Development about Economics?
- Positive Economics
- Normative Economics
- Economics of Welfare

As Human Development
- Rising per capita income is a necessary condition for HD, but is not enough.
- Public policy is needed to translate growth into HD. How?
  - Emphasis on investment in health, education, skills of people
  - More equitable distribution of assets and income
  - Well structured public expenditures
  - Empowerment of people to participate

The four pillars of Human Development
- Efficiency
- Equity/Equality
- Freedom & Empowerment
- Sustainability

The four key choices
- Healthy and long lasting existence
- Access to knowledge in its different expressions
- Opportunities and material resources for a decent standard of living
- Free participation in community life and collective affairs

Economics and Welfare
- Income and quality of life
- Inter-personal comparison income as comparison of welfare
- Capacity to convert income into well-being
- Well-being?

HD Strategies
- Rising per capita income is a necessary condition for HD, but is not enough.
- Public policy is needed to translate growth into HD. How?
  - Emphasis on investment in health, education, skills of people
  - More equitable distribution of assets and income
  - Well structured public expenditures
  - Empowerment of people to participate
Empowerment

- Equality is generally understood as equal opportunity to play the game
- The rules of the game may be biased
- Equality to be real, must include equal power to make the rules: empowerment
- Participation is a sure way to empowerment

Sustainability

- Economic sustainability
  - Resources generated by the activity provide for resources needed to sustain the activity
  - A viable business model
  - It is possible to have workable business/quasi-business model for services. For livelihoods, a business model is a big challenge: e.g., Rythu Bazar

Equality

- Not efficiency at macro-economic level but target group level
- Ask yourself
  - (a) Will all benefit?
  - (b) Will some people be left out?
- Can aggravate inequality
  - (c) Will some people lose out?
- Not desirable, not HD approach

Efficiency

- Cost minimisation
- Profit maximisation (allocative efficiency)
- Product mix
- Labour – Capital mix
- Economic efficiency
  - Pareto
  - Kaldor
- Turning farming lands into SEZ – is it efficient?

What is dimension?

- Component aspects of human development – all coexisting
- Human Development is multi-dimensional
  - Non-hierarchical, irreducible, incommensurable

List of dimensions

- Deepa Narayan (World Bank): Voices of the Poor
  - Material Well being
    - Food
    - Assets
    - Work
  - Bodily well-being
    - Health
    - Appearances
    - Physical Environment

List of dimensions

- Social well-being
  - Being able to care for, marry, settle, have children
  - Self-respect and dignity
  - Peace, good family & community relations
  - Security
    - Civil peace
    - Physically safe and secure environment
    - Personal safety
    - Old age security
    - Confidence in future
    - Security of capabilities

List of dimensions

- Psychological well-being
- Peace of mind
- Happiness
- Harmony (including spiritual life and religious observance)
18

Are Inequality and HDI correlated?

- Empirical studies point to significant correlation between inequality and human development
- The process of the growth
- Level of wealth-inequality at the start of industrialization
- Effective redistribution by state

EG: HDI: Comparing Performance

| HD Lopsided Low income, high HD: Unsustainable Virtuous Growth and high HD impact each other beneficially |
|-------------------------------------------------|-------------------------------------------------|
| Vicious Low HD and low income each pulling other down | EG Lopsided Low conversion of GNP growth into HD |

Growth and HD in Indian States

Measuring Human Development

Backdrop to the HDI

- ‘Physical Quality of Life Index’ developed by Morris David Morris 1979
- Developed by Mahbub-ul-Haq and Amartya Sen; other experts include Sudhir Anand, Paul Streeten, Meghnad Desai

Backdrop to the HDI

- A simple composite index comprising measures of knowledge (Education), longevity (Health) and decent standard of living (Income)
- Basis for assigning ranks to countries
- Provides for comparison at the global, regional, national and sub-national level

HDI

- Tries to capture capabilities
- Three indicators:
  - Longevity (life expectancy at birth)
  - Educational attainment (adult literacy and ratios of primary, secondary and tertiary enrolment)
  - Mean ‘living standard’ (GDP per capita in PPP)
- Index = \( \frac{ Actual \ value \ - \ Minimum \ value }{ Maximum \ value \ - \ Minimum \ value } \)
Goalposts for calculating HDI

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Minimum value</th>
<th>Maximum value</th>
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</thead>
<tbody>
<tr>
<td>Life expectancy</td>
<td>25 years</td>
<td>85 years</td>
</tr>
<tr>
<td>Adult literacy</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Gross enrolment</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>GDP per capita</td>
<td>100 (PPP US$)</td>
<td>40,000 (PPP US$)</td>
</tr>
</tbody>
</table>

Calculating the HDI

HDI = \frac{1}{3} \left( \frac{\text{Life expectancy}}{85} + \frac{\text{Adult literacy}}{100} + \frac{\text{PPP per capita income with declining weight for higher incomes}}{40,000} \right)

Calculating the HDI: Key Issues/Concerns

- Are the indicators the best ones to measure the various components? Is there a bias in favour of what is inherently measurable?
- Even the best data systems cannot capture important aspects of human choices that are hard to measure (cultural freedoms, peace, conflict, security, environmental concerns)

A Working Example: India

- Index for country with life expectancy of 63.7: \( = \frac{(63.7-25)}{(85-25)} = \frac{38.7}{60} = 0.645 \)
- Index for educational attainment:
  - Index for adult literacy (61.0%): \( = \frac{(61.0 - 0)}{(100 - 0)}= 0.610 \)
  - Index for enrolment (63.8%): \( = \frac{(63.8 - 0)}{(100 - 0)}= 0.638 \)
  - Index for educational attainment: \( = \frac{2 \times (0.638) + 1 \times (0.638)}{3} = 0.620 \)
- Index for ADJUSTED real GDP per capita ($3452): \( = \frac{\log(3452)}{\log(100)} = \frac{1.53807}{2.60206} = 0.591 \)
- HDI = \( \frac{0.645 + 0.620 + 0.591}{3} = 0.619 \)

Calculating the HDI: Key Issues/Concerns

- Requirement of uniform availability, definitional consistency and statistical sensitivity
- Relevance of global measures for local context and action: need for disaggregated data and indicators relevant for implementation

(HDI Trend for India)

<table>
<thead>
<tr>
<th>Year of Publication of Global HDR</th>
<th>HDI Value</th>
<th>HDI Rank (Number of countries in parentheses)</th>
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</thead>
<tbody>
<tr>
<td>2007/08</td>
<td>0.619</td>
<td>128 (out of 177 countries)</td>
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<td>2006</td>
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<td>2004</td>
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<td>2002</td>
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<td>2001</td>
<td>0.571</td>
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<tr>
<td>2000</td>
<td>0.563</td>
<td>126 (out of 174 countries)</td>
</tr>
</tbody>
</table>

Engendering the HDI: GDI and GEM

- Attempt to explore gender dimension of human development
- 1995: Beijing Conference and Global HDR
- Gender Development Index (GDI): simple measure of inequality between men and women on components of the HDI
- Gender Empowerment Measure (GEM): a positive measure of progress by women in the economic, professional and political spheres

Gender Development Index (GDI)

- The 3 dimension indices calculated for males and females and combined, penalizing differences in achievement
- Equally distributed index (EDI) = \{[(female popn. share (maleindex\textsuperscript{1} ?))]+ [male popn. Share (male index\textsuperscript{1} ?)]\textsuperscript{1/2} \}
  where ?= 2 (moderate penalty for gender inequality)
- GDI = simple average of the 3 EDIs

Gender Empowerment Measure (GEM)

- Focusing on women’s opportunities rather than capabilities, in terms of:
  - Political participation (% share of parliamentary seats)
  - Economic participation (% share as in managerial and technical positions)
  - Power over economic resources (estimated earned income, PPP US$)
• Equally distributed equivalent percentage (EDEP) calculated for each dimension:

\[
EDEP = \frac{\text{female popn. share(female index)} + \text{male popn. share(male index)}}{2} + \frac{1}{P}
\]

where \( P \) = 2.

• The EDEP for political and economic participation indexed by dividing it by 50 assuming equal empowerment of the sexes.

• GEM = simple average of the 3 indexed EDEPs

Dimensions Indicators

• A long and healthy life
• Knowledge
• A decent standard of living

Human Poverty Index (HPI)

• Measures the extent of deprivation in HDI's three dimensions

Advantages (HDI, HPI)

• Tool for advocacy
• Ranking of areas
• Tool for research (if composite measure of development is needed)
• More reliable tool than per capita income measures for capturing income improvements in human well-being
• Politically appropriate impacts of over-development and policies and achievements
• No immediate uses for policy design: tailor made tools required

Criticism (HDI, HPI)

• Composite indicators may hide more than reveal fundamental problem of weighting and aggregation
• Sometimes mixing of output and input indicators: not useful as evaluation tool
• Fundamental problem of weighting and aggregation
• Sometimes mixing of output and input indicators: not useful as evaluation tool

HPI-1 Formula

\[
HPI-1 = \left[ \frac{1}{3} \left( P_1 + P_2 + P_3 \right) \right]^{1/3}
\]

where:

\( P_1 = \text{Probability at birth of not surviving to age 40} \)
\( P_2 = \text{Adult illiteracy rate} \)
\( P_3 = \text{Unweighted average of population without sustainable access to an improved water source and children underweight for age} \)

HPI-2 Formula

\[
HPI-2 = \left[ \frac{1}{4} \left( P_1 + P_2 + P_3 + P_4 \right) \right]^{1/4}
\]

where:

\( P_1 = \text{Probability of not surviving to age 60 (times 100)} \)
\( P_2 = \text{Functional illiteracy rate} \)
\( P_3 = \text{Relative income poverty} \)
\( P_4 = \text{Long-term unemployment} \)

The ‘cubing’ i.e. \( a = 3 \) ensures greater weight for the component with acute deprivation.
Why should we compare?
- To ascertain the weakest unit— weaker pockets in HD perspective
- To ascertain the Strongest unit— Sector wise in HD perspective
- To prepare Success Stories & Distress Stories for awareness building

In every HDR relative positions of administrative units indicate the level of Human development in that unit
- Global HDR — the countries of the World
- National HDR — the States
- State HDR — the Districts
- District HDR — the Blocks/ Gram Panchayats & Municipalities

For Comparison of Sub-District level Data
- In Rural areas
  - Comparison between the Blocks
  - Comparison between the Gram Panchayats
- In Urban areas
  - Comparison between Municipalities
  - Comparison between Wards

Sharing our experiences....
- Non availability of Data
- Data varies between Departments
- Time frame may vary
- Dilution of Data due to consequent estimation
- Non availability of data for some new/ reorganised administrative units

ANDRAGOGY
- Adults are Autonomous and Self-Directed.
- Adults Have Accumulated a Foundation of Life Experiences and Knowledge.
- Adults are Relevancy-oriented
- Adults are Goal-oriented
- Adults are practical
- Implication for Training

Adults do not learn in the same way as children.
Adults are Autonomous and Self-Directed
Adults are likely to resist learning conditions that conflict with their self-concept.
Adults need to be free to direct themselves.
Trainer must actively involve adult participants in the learning process and serve as facilitators for them.

Adults have accumulated a foundation of life experiences and knowledge.
Learners should be able to relate what is being studied to their personal/professional experiences.
Adults have a rich foundation of experience with which they will consider new experiences and their implications for work.
Adults have acquired many fixed habits and patterns of thought and, therefore, possibly less open-minded.

Adults have a relevancy oriented?
Adult must see a reason for learning.
Theories and concepts must be related to a setting familiar to participants.

Adults are goal-oriented
Participants must be shown how the training course in general and the session in particular will help them attain their goals.

Adults are practical
Adults are more concerned with their performance.
Instructions should be task-oriented, and it should take into account the wide range of different backgrounds of learners.

• They are primarily concerned with the problem they are facing in their job situation.
• Adult learners are generally more interested in the solution of the problem rather than the content of it.

Implication for Training
• The physical environment should be one in which adults feel at ease, with furnishings that are comfortable and informal.
• The psychological climate should be one that causes adults to feel accepted, respected and supported.

Implication for Training
• There should be a spirit of mutual respect and cooperation between the trainer and the learners, in which there is freedom of expression without fear of being ridiculed.
• A person feels more ‘adult’ in an atmosphere that is friendly and informal.
Implication for Training
• The behaviour of the trainer probably influences the learning more than any other single factor.
• The trainer conveys in many ways his or her attitude, interest and respect for learners.
• The trainer, who takes time and trouble to get to know the learners individually and calls them by their first names is, promoting the right sort of atmosphere.

Implication for Training
• Because adults are themselves a rich source for learning, greater emphasis can be placed on techniques that use their experience.
• Training methods such as group discussions, case studies, in-tray exercises, and action learning, promote participation in a learner-centred environment.

Implication for Training
• Assist the learners to define their learning needs.
• Design learning to suit an individual learner’s existing knowledge.
• Help the learner understand how to use learning resources, including the experience of sharing their learning experiences with others.

Implication for Training
• Assist learners to assume increasing responsibility for planning their own learning.
• Reinforce the self-concept of the learner to encourage achievement of objectives.
• Encourage the use of formative assessment techniques, including free exchange of feedback.

WHAT IS FEEDBACK
The process by which information about the results of an action is communicated to the source of the action

Effective Feedback
H - Hear
U - Understand
M - Motivate
A - Acceptable
N - Negotiate

GIVING FEEDBACK
• Concentrate on behaviour rather than personality
• Give observation rather than inference
• Specific rather than general

WHAT IS THE PURPOSE OF FEEDBACK
In Training Feedback Received by Trainees From Other Trainees and Trainers can Provide the Basis for Helping to Develop Their Behaviour and as a Result to Improve Their Performance.
GIVING FEEDBACK
• Suggest/advice change rather than opinion
• Timely
• Provide constructive, supportive and non threatening

RECEIVING FEEDBACK
• Be positive to the feedback – value the help given
• Listen – don’t react.
• Try to see it from the giver’s point of view
• Clarify and check your understanding

RECEIVING FEEDBACK
• Compare with feedback from others
• Ask for detail not given
• Explore options
• Decide action you will take

Poverty
• Definition of Poverty
• Measurement of Poverty
• Identification of Poor
• Poverty Alleviation Programme: Design & Implementation

Definition
• Poverty Line
• Per Capita Consumption

Measurement
• Poverty Ratio
• Percentage of People Living Below the Poverty Line

Poverty Line: Task Force
• Age-sex-activity Distribution of Population
• Average Calorie Norm
• National Poverty Line
• Updating of Poverty Line

Average Daily Calorie Requirement
• 2400 kcal per cap in Rural Areas
• 2100 kcal per cap in Urban Areas

Poverty Line in 1973-74: Monthly per capita Consumption Expenditure
• Rs. 49 per month in Rural Areas
• Rs. 56 per month in Urban Areas
• Total Consumption = Food + Non-Food
• NSS 28th Round Consumer Expenditure

- Per Person monthly Consumption of Rs. 327.6 in Rural Areas
- Per Person monthly Consumption of Rs. 454.1 in Urban Areas

Poverty Estimates

<table>
<thead>
<tr>
<th>Year</th>
<th>Poverty Ratio (%)</th>
<th>No of Poor (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973-74</td>
<td>54.9</td>
<td>321.3</td>
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<tr>
<td>1993-94</td>
<td>36.0</td>
<td>320.4</td>
</tr>
<tr>
<td>1999-2000</td>
<td>26.1</td>
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</tbody>
</table>

Identification of Poor

- BPL Census 1992: Income Approach in Eighth Plan
- BPL Census 1997: Exclusion Criterion in Ninth Plan
- BPL Census 2002: Score Based Ranking of Rural Families using 13 Socio-Economic Parameters: Tenth Plan

13 Socio-Economic Parameters

- Food Security, Consumer Durables
- Shelter, Clothing, Sanitation
- Literacy, Indebtedness, Migration
- Means of Livelihood
- Children’s status
- Labour type, Operational holding, Preference of Assistance
Employment Generation Programmes

• NREP : 1980
• RLEGP : 1983
• JRY = NREP + RLEGP = 1989
• EAS in some blocks: 1993
• EAS universalised in 1997

Employment Generation Programmes

• 1st April 1999 : EAS Changed
• 1st April 1999 : JRY restructured as JGSY
• Early 2001 : FFWP in some blocks
• Sept. 2001 : SGRY
• April 2002 = SGRY = EAS + JGSY + FFWP
• 14th Nov. 2004 : NFFWP in 150 districts
• Sept. 2005 : NREGA in 200 districts

Eleventh Plan Targets : Poverty

• Poverty Reduction by 10% points.

Eleventh Plan Targets : Human Development

• Reduce Dropout Rates in Elementary to 20%.
• Raise Literacy Rate to 85%.
• Reduce Gender Gap in Literacy Rate to 10% points.
• Reduce IMR to 28 per thousand

Monitorable Targets in Broad Categories

• Income
• Poverty
• Education
• Health
• Women and Children

Targets Broken Down at State Level

• GDP Growth Rate
• Agricultural Growth
• Poverty Ratio
• Drop Out Rate
• Literacy Rate
• Gender Gap in Literacy Rate
• Infant Mortality Rate
• Maternal Mortality Ratio
• Total Fertility Rate
• Child Malnutrition
• Anemia among Women and Girls
• Sex-Ratio

Stages Involved in Preparing an Interactive Session

• Objective of a session
• Entry Behaviour
• The Learning Event
• Deciding the Content
• Planning the Sequence
• Planning for Maximum Recall
• Structuring the Session
• Use of Visual Aids
• Conducting Session
• Session Planning
• Close

Objective of a session

At the end of your session learners will be able to ...
**OBJECTIVE**
States what a learner will be able to do at the end of the session

**OBJECTIVE**
S - Specific
M - Measurable
A - Action Oriented
R - Realistic
T - Time Specific

**OBJECTIVE**
know identify
understand describe
appreciate state
working knowledge explain
be aware of repair

**ENTRY BEHAVIOUR**
Takes account of a learner's knowledge, skills, attitude, experience, learning style etc relevant to the objective.

**BEHAVIOUR**
- Knowledge - knowing what and how to do it
  - facts, procedures
  - standards
  - working environment
- Skills - having the ability to do it
  - physical
  - interpersonal, social
  - intellectual
- Attitude - being prepared to do it
  - to people, quality, safety
  - willingness to change

**Relationship Between Objectives**

**Task of a Trainer**
Enabling Objectives
Improved Performer
Incoming Trainee
The Learning Event

Deciding Content

Spray diagram

Planning the Sequence

Planning The Sequence
- Known to the unknown
- Simple to the complex
- Concrete to the abstract
- Observation to the theory
- General to the particular

LEARNING EVENT
Creates a suitable opportunity for the learner to achieve the objective
Planning for Maximum Recall

Period of Effectiveness

Time available

Period of maximum effectiveness - 20/30 minutes

Structuring the Session

Introduction

Gain attention/rapport
Explain purpose/reason for learning about topic
State objective
Link to entry behaviour
State participation
Outline content and structure
State finish time

Tips for Creating an Effective Introduction.

Structuring the Session

Introduction

Gain attention/rapport
Explain purpose/reason for learning about topic
State objective
Link to entry behaviour
State participation
Outline content and structure
State finish time

Body

STRUCTURING THE SESSION

Introduction

Body

Summary

Review of the session objective.
Ask for a show of hands in response to a general question.
Ask a series of questions related to the session topic.
Use an interesting or famous quotation.

Relate the topic to previously covered content.
Use a case study or problem-solving activity.
Use a videotape or other media.
Use a training film.
Show an appropriate cartoon with the overhead or slide projector.
**Summary**

- Restate purpose/reason for learning about topic
- Restate objective
- Review content and major points
- Invite final questions
- Carry out performance assessment where appropriate
- Give feedback

**Use of Visual Aids**

- Identify topic
- Prepare a spray diagram.
- Edit spray diagram to identify 'core' items
- Express core items as an objective
- Consider entry behaviour of trainees
- Consider size of group

**Planning**

- Simple
- Attract and Hold Attention
- Use colour to give contrast to different major points
- Use Formal visuals for pre-prepared material
- Do not make it clumsy
- Use appropriate Font size for visibility
- Use whiteboards and flipcharts for informal visuals

**Preparing Notes**

- They should be kept as simple as possible.
- They should be easy to read - you might be some distance away from your notes.
- Use colour to ensure we do not miss major points.
- Use sketches to indicate where a visual aid is to be used
- Include a time schedule.

**Decide structure to be used**

- Consider visual aid hardware available
- Prepare formal visual presentation of major points
- Consider informal visual aids
- Decide when to invite questions

**Decide timing**

- Decide how learning performance is to be assessed
- Write session notes
- Check timing
- Check equipment

- They should be kept as simple as possible.
- They should be easy to read - you might be some distance away from your notes.
- Use colour to ensure we do not miss major points.
- Use sketches to indicate where a visual aid is to be used
- Include a time schedule.
Conducting Session

- Communicate on a personal level. The trainer should attempt to relate to the trainees during the session.
- Maintain eye contact with the trainees. Eye contact gives the trainer feedback on how well trainees understand the content and helps to communicate a caring attitude on the part of the trainer.

Presentation Techniques

- Use the session notes prepared during the planning stage. The notes include reminders and key points in the session introduction, body and summary.
- Open the session with a good introduction designed to capture the interest and attention of the trainees.

- Exhibit enthusiasm about the topic. Smiling, moving around the room and gesturing with hands and arms project a feeling of energy and excitement.
- Modulate voice to suit size of group
- Avoid reading session notes
- Use language appropriate to trainees
- Keep check of estimated timing
- Give relevant examples to support major points
- Maintain eye contact

- Present visual aids only when needed
- Avoid reading visual presentation word for word
- Assess trainee’s reaction and adjust if necessary
- Assist learning by use of informal visual aids
- Check trainee’s understanding where appropriate
- Where possible invite trainee’s participation

- Avoid the use of slang or repetitive words, phrases or gestures that may become distracting with extended use.
- Avoid the use of fillers (e.g. “um”, “er”, “you know”)
  Use a variety of audiovisual media.
  Ask a number of questions and encourage trainees to ask questions.
- Provide positive feedback when trainees ask questions, answer questions or make comments.
- Use trainee’s name as often as possible.
- Display a positive use of humour (e.g. humorous transparencies or slides, topic-related stories.)
**Tips to Reduce Presentation Anxiety**

1. Avoid eating a big meal before the session. Not only will a full stomach make you drowsy, but it makes it more difficult to move around the room with energy.

2. Arrive early to make sure that everything is ready before the first trainee arrives.

3. Make smooth transitions between parts of the session. These transitions should be highlighted in the sessions notes and might include:
   - A brief overview of the next topic.
   - A review of the agenda between topics.
   - A change of media.
   - An interim summary before a new topic.
   - An activity (case study or problem-solving activity).

4. Close the session with a brief but powerful summary.

---

**FINANCING OF HUMAN DEVELOPMENT**

**Purpose and Structure**

- **Purpose**
  - Overview of public financing of human development in India
  - Understanding key issues
- **Structure of discussions**
  - Importance of Social Sectors
  - The Indian Context
  - Indian States - Typology
  - Myths Regarding Social Sector Spending
  - Stylised Facts of Social Sector Financing
  - Options for Financing

**Defining Social Sectors**

- Social sectors cover all those sectors that seek to alleviate income and human poverty
- Global recognition to social sectors
- Adoption of Millennium Development Goals (MDGs)
  - for reducing poverty, hunger, disease, environmental degradation and discrimination against women
  - targets to be achieved by 2015
### Importance of Social Sectors
- Essential to ensure decent quality of life
  - Merit Goods
- Valuable in themselves as social sector attainments enhance the capabilities of human beings
  - Human Development (HD) Approach
- Critical for enhancing productivity of the economy
  - Human Resource Approach

### Proposed Monitorable Socio-Economic Targets XI Plan
**Income & Poverty**
- Accelerate growth rate of GDP from 8% to 10% and then maintain at 10% in the 12th Plan in order to double per capita income by 2016-17
- Increase agricultural GDP growth rate to 4% per year to ensure a broader spread of benefits

**Create 70 million new work opportunities.**
- Reduce educated unemployment to below 5%.
- Raise real wage rate of unskilled workers by 20 percent.
- Reduce the headcount ratio of consumption poverty by 10 percentage points.

### Importance of Social Sectors
- Essential to ensure decent quality of life
  - Merit Goods
- Valuable in themselves as social sector attainments enhance the capabilities of human beings
  - Human Development (HD) Approach
- Critical for enhancing productivity of the economy
  - Human Resource Approach

### Education
- Reduce drop out rates of children from elementary school from 52.2% in 2003-04 to 20% by 2011-12.
- Develop minimum standards of educational attainment in elementary school, and by regular testing monitor effectiveness of education to ensure quality.
- Increase literacy rate for persons of age 7 years or more to 85%.
- Lower gender gap in literacy to 10 percentage points.
- Increase the percentage of each cohort going to higher education from the present 10% to 15% by the end of the 11th Plan.

### Proposed Monitorable Socio-Economic Targets XI Plan
**Health**
- Reduce infant mortality rate (IMR) to 28 and maternal mortality rate (MMR) to 1 per 1000 live births.
- Reduce Total Fertility Rate to 2.1.
- Provide clean drinking water for all by 2009 and ensure that there are no slip-backs by the end of the 11th Plan.
- Reduce malnutrition among children of age group 0-3 to half its present level.
- Reduce anemia among women and girls by 50% by the end of the 11th Plan.

### Women and Children
- Raise the sex ratio for age group 0-6 to 935 by 2011-12 and to 950 by 2016-17.
- Ensure that at least 33 percent of the direct and indirect beneficiaries of all government schemes are women and girl children.
- Ensure that all children enjoy a safe childhood, without any compulsion to work.

### Infrastructure
- Ensure electricity connection to all villages and BPL households by 2009 and round the clock power by the end of the Plan.
- Ensure all weather road connection to all habitation with population 1000 and above (500 in hilly and tribal areas) by 2009, and ensure coverage of all significant habitation by 2015.

### Proposed Monitorable Socio-Economic Targets XI Plan
**Environment**
- Increase forest and tree cover by 5 percentage points.
- Attain WHO standards of air quality in all major cities by 2011-12.
- Treat all urban waste water by 2011-12 to clean river waters.
- Increase energy efficiency by 20 percentage points by 2016-17.
Indian Context - Challenges
• Number of Poor - 260 mn
  - Population Brazil (174 mn) &
   Germany (83 mn)
• Illiterates - 296 mn
  - Population of United States (288
   mn)
• High levels of illiteracy among workers
  - Rural male - 40 % female - 74%
  - Urban male - 16 % female - 44%
• Undernourished - 233 mn
  - Population of Indonesia (214 mn)
    & Ghana (20 mn)
• Income inequality - share in
  consumption exp.
  - top quintile - 41.8% bottom
   quintile - 8.7 %

HD - Comparisons
Asian Countries (Adult literacy rate):

<table>
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<tr>
<th></th>
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</tr>
</thead>
<tbody>
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<td>Thailand</td>
<td>68</td>
<td>86</td>
<td>92</td>
<td>93</td>
</tr>
<tr>
<td>China</td>
<td>n/a</td>
<td>69</td>
<td>77</td>
<td>91</td>
</tr>
</tbody>
</table>

Deprivation - Regional Dimensions
• States of Bihar, Orissa, UP and
  MP account for
  - more than 50 % of the
    people living below the
    poverty line
  - almost 40 % of the illiterates
• India cannot hope to attain
  MDGs without significant
  progress in the indicators in the
  poorest States – Bihar, Orissa,
  MP, UP and Rajasthan

Myths Regarding Social Sectors
MYTH NO. 1
Social Sector Spending is adequate
Public spending in developed
countries is low
• Proposed 6 % allocation for
  education and health - Kothari
  Commission & ICSSR-ICMR
  joint panel
• Average for education -3 %
  health - 1%
• Developed countries health
  spending is more than 6 %
• Germany : 8 %, Sweden: 7.5
  %, UK and USA:6.2%
• Among South Asian countries...

Myths Regarding Social Sectors
Social sectors funding has increased over the years
• In absolute terms the combined
  allocations of Centre and States
  increased
• education- from Rs. 17,093 in
  1990-91 to Rs. 80, 779 in
  2003-04
• health – from Rs. 5317 in 1990-
  01 to Rs. 36.850 in 2003-04
• But as percentage of GDP and
  total expenditure....

Stylised facts of social sector
spending
• Social sector policy yields best
  results when integrated rather
  than sectoral
• Since social sector investments
  have a yields results in the
  medium to long term – public
  investments need to be
  sustained over a long period
• Social sector programmes need
  to be designed and
  implemented in an integrated
  manner to reap synergies
Shortfall
- GDP at current prices: Rs.2519785 cr. (2003-04)
- Proposed 6% of GDP: Rs. 151187 cr.
- Current education spending: Rs. 87079 cr.
- SHORTFALL: Rs. 70408 cr.
- Constraints
  - cannot borrow as fiscal deficit is already high at 4.5%
  - User fees hampers utilisation

Financing the Shortfall
- Be Fiscally responsible
  - Rs.3172.96 crores is the ‘interest’ on outstanding loans
  - Rs.88 to 207 crores lost due to recent Parliament disruptions
- Raise resources
  - we have the lowest tax/GDP ratio in the world – 8%
  - Even if Tax/GDP ratio reaches 1991 levels, it will release 2% of GDP
- More options can include.....

Options
- Disinvestment
  - For 2003-04 target amount 13200 crores
  - If 5% allocated to social sectors ~660 crores
  - Per district allocation for NREGA 56 crores
  - 11 low literacy districts could be funded
  - Even available amount not allocated to social sectors

Options
- Restructuring Social Sector Expenditures
  - Greater allocation for primary level facilities
  - Better utilisation of expenditures and infrastructure
  - Greater efficiency of services
  - Institutional reform

Options
- Corporate Social Responsibility
  - IMRB survey 2000 indicates that of 650 randomly selected companies, 69% working on the ground on infrastructure and health
  - Triple bottom line-economic, social & environmental
- Community Financing
  - Assuming importance with EGS in MP
  - Community health insurance
  - Himachal experiment with local co-funding of projects

Options
- Official Development Assistance
  - Importance of ODA stressed by Zedillo Panel
  - Total external assistance in India 2004-05 at 7360 crores
  - less than 2% of development expenditure
  - Higher proportion in education sector
  - X Plan period - 4 major externally aided projects
  - Shiksha Karmi, Lok Jumbish, DPEP and Janshala

Sex and Gender
- Sex is biologically determined
- Gender is socially constructed
- Gender varies across cultures and from time to time. Sex does not.
- Construction of gender is a historical process

Equality vs Equity
- Treating equally is treating the ‘same’ – giving 50:50
- Simple equality is equality of opportunity
- Need of EQUITY OR EQUALITY OF OUTCOME - need to provide for people according to their situation
- Simple equality ensures equality at the starting line - equity attempts equality at the finishing line
Women spent most of the time in nonmarket activity but men are actively involved in market activity.

<table>
<thead>
<tr>
<th>Country</th>
<th>Time spent by women (minutes per day)</th>
<th>Time spent by men (minutes per day)</th>
<th>% of male</th>
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</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>545</td>
<td>496</td>
<td>110</td>
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<tr>
<td>Colombia (Urban)</td>
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<td>500</td>
<td>135</td>
</tr>
<tr>
<td>South Africa</td>
<td>332</td>
<td>273</td>
<td>122</td>
</tr>
</tbody>
</table>

Source: Human Development Report 2006
Dimensions of gender inequality

- Mortality inequality
- Natality inequality
- Basic facility inequality
- Special opportunity inequality
- Professional inequality
- Ownership inequality
- Household inequality

Gender Budgeting - a definition

"Gender budget initiatives analyse how governments raise and spend public money, with the aim of securing gender equality in decision-making about public resource allocation; and gender equality in the distribution of the impact of government budgets, both in their benefits and in their burdens. The impact of government budgets on the most disadvantaged groups of women is a focus of special attention."

Aims of Gender budgeting

- Close gaps/improve links between policy pronouncements, resource allocation and outcomes on gender equality
- Key tool for sensitization of various stakeholders
- For Governments-tool for effective policy implementation
- Key tool for assertion of rights, through participatory process of reshaping budgets

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What is Gender Budgeting?

- An exercise to translate stated gender commitments of the Government into budgetary commitments.
  - Strategy for ensuring Gender Sensitive Resource Allocation and a tool for engendering macro economic policy
  - Entails affirmative action for empowering women
  - Covers assessment of gender differential impact of Government Budgets and policies (Revenue and Expenditure).
  - Enables Tracking and Allocating resources for women empowerment
  - Opportunity to determine real value of resources allocated to women

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- Key tool for sensitization of various stakeholders
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- Key tool for assertion of rights, through participatory process of reshaping budgets

Five Steps of Gender budgeting

1. Describe the situation of women and men, girls and boys, who are served by a particular sector or ministry, such as agriculture, health etc.
2. Examine government policies and programmes in the sector, to see whether they address the ‘gender gaps’- that is, inequalities in the service offered to each group as described in the first step.
3. Examine the budget to see whether sufficient money has been allocated to implement effectively the gender-sensitive policies and programmes
4. Monitor whether the allocated money has been spent and who has benefited from the money - for example, whether funding for health services reached women or men through clinics, hospitals and extension services
5. Go back to the first step and re-examine the situation, to see whether the budget and its associated programme has improved on what was initially described.

Tool 1: Gender Aware Policy Appraisal-Linking Budgets to Policies:

- Examine position of women & men, boys and girls in each area of economic and social life addressed by the budget, taking into account age, ethnic group, location and class and policies in this regard
- Examine whether resources are being allocated in ways that are likely to implement the policy and reduce gender inequalities or increase inequalities.

Tool 2: Beneficiary Assessments

- Actual or potential beneficiaries of public services are asked to assess how far public spending is meeting their needs as they perceive them and what their priorities for public expenditure are
- Techniques include: Opinion polls, attitude surveys, focus group discussions, interviews, role play.
Tool 3: Public Expenditure Incidence Analysis
Gives a sense of how gender-inclusive expenditures actually are by comparing the distribution of public spending among women and men, girls and boys.
• Estimate unit cost of providing a service i.e., 1 PHC Doctor for one year
• Estimate use of doctor’s service by men and women, boys and girls
• Calculate amount spent per year on women and men

Tool 4: Revenue Incidence Analysis
• Shows proportion of income paid in taxes and user charges by different categories of individuals/women/men or households

Tool 5: Sex - Disaggregated Analysis of the Impact of the Budget on Time Use
• Focuses on the outcome for the amount of unpaid care work done by women and men.
• Whenever expenditure cuts are proposed, the question should be asked: Is this likely to increase the time that men and women spend on unpaid care work?

Tool 6: Gender-Aware Medium-Term Economic Policy Framework
• Incorporation of gender variables into the models used for medium-term public expenditure planning
• For example, inclusion of sex-disaggregated variables in the labour market component or new variables to represent the unpaid care economy

Tool 7: Gender-Aware Budget Statement
Government can issue a gender aware budget statement utilizing one or more of the above tools to analyze its programmes and budgets.
• Share of expenditure targeted to gender equality
• Women’s participation in the public-sector employment relative to men
• Share of prioritized expenditures towards women
• Share of expenditure devoted to official gender units

Gender Budget in India: Current Scenario
• Analysis of annual budgets: dissemination amongst parliamentarians during debates on demand for grants
• Parliamentary Standing Committee for DWCD calls for action on Gender Budgeting
• FM in his 2004-05 budget speech commits to gender budgeting
• Expert Group on Budget classification and GB

Gender Budget in India: Current Scenario
Supplementary state level work by feminists/NGOs/NIPCCD
• Analyzing state budgets, specific sectors and specific large programmes
• Impact of specific expenditure
• Impact of labour market changes on women and how budgets are/are not dealing with them
• Building budgets from below involving the panchayats

Path Ahead
• Pursue Gender Mainstreaming in the Government through coordination with Gender Budget cells
• Widening scope of National Statistical System
• Widening scope from public expenditure to Revenues, Fiscal and Monetary Policies
• Pursue gender budgeting by States with help of planning Commission and MOF
• Capacity Building- Coordinate with training institutes and experts to standardize methodology and tools
To Conclude

• “It is more important to create a general awareness and understanding of the problems of women’s employment in all the top policy and decision making and executive personnel. There is also the special problem facing women like the preference for male children for social and cultural reasons. This will require awareness, understanding and action.”

(6th Five Year Plan)

PURPOSE OF DISCUSSION

• Share views
• Collect and generate ideas
• Obtain reactions or agreement
• Motivation
• Team building
• Attitude change

DECISION MAKING

EVALUATION

SYNTHESIS

ANALYSIS

COMPREHENSION

INFORMATION

TWO FACTORS INFLUENCING A DISCUSSION

DISCUSSION BEHAVIOURS

• seeking information
• giving information
• supporting
• building
• proposing
• disagreeing
• cutting across
• stating difficulty
• summarising

QUESTIONS

HIGH ORDER
Stimulate thinking
Build on existing knowledge
Apply ideas to new situations

LOW ORDER
Recall of information
Right or wrong answers
Known or existing situations

KEY QUESTIONS

• High order
• Prepared in advance
• Open
• Stimulate contributions
• Non-threatening
• Relevant to learning needs
• Related to entry behaviour
“The Sunday edition of a big newspaper printed in one million copies consumes a hundred acres of forest”

'No Limits to Learning'
A Report to the Club of Rome

PREPARING TO LEAD A DISCUSSION
- Set an Objective
- Analyse the Topic
- Consider the Group
- Identify & Prepare Key Question
- Prepare an Introduction
- Arrange Other AIDS
- Organise Physical Arrangement

INTRODUCTION
- State the Topic
- State the Purpose
- Outline Limits of Topic
- Timing
- Set the Scene
- Link with the Experience of the Group
- Bring all to a Common Starting Point
- Arouse Interest
- Prepare the Group to Contribute
- Lead up to First Key Question

CASE STUDY
- What is a Case?
  - Depicts real life administration situation - factual
  - Chronological. Narrative of problem & decision-making
  - Trainee may face such situations
  - Learns the logic - evaluating the process not the solution
  - Develop capacity to analyse
  - Objective - no value-judgement

HOW TO LEAD
- Student - fresh or experienced
- Ignorant, perplexed, insecure, confused, apprehensive about colleagues, afraid of a critical teacher and thinks loosely
- Teacher helps him to help himself
- Leader merely leads him through the case
- Keeps discussion on the right track
- Keeps proceedings orderly
- Controls speed
- Identifies and clears blocks
- Does time management

HOW TO LEAD
- Controls law & order
- Keeps out of the way and leaves the talking to the trainees
- He himself should be a student
  - Listen intently
  - Respect student views
  - Ask relevant questions & show interest
- Supply info to clear bottleneck & gap
- Help in expressing

HOW TO LEAD
- Never use ped tools & leave him to wade through his ignorance & confusion
- Never indulge in the 7 ped. sins: condescension, sarcasm, cross-examination, discourtesy, self-approval, self-consciousness & talkativeness.
- Trainee’s understanding should be his own, not the teacher’s
PURPOSE OF GROUP EXERCISES
- leadership
- communication
- negotiation
- decision making
- problem solving
- team building

LEARNING FROM GROUP EXERCISES
- experiencing
- applying
- discussing
- generalising

SUMMING UP
- Sum up at two stages
- Summary from time to time
- End of session to give gist - never his own views
- Remember: trainee’s brain is not an empty vessel to be filled with YOUR knowledge. Elicit the knowledge lying within.

HOW TO LEAD
- Leader must use three tools
  - Ask questions but only when necessary, in response or to advance
  - Restate or rethread to explain
  - Interjection or opinion to regenerate, clarify or supply info

GROUP EXERCISE
Advantages
- trainee centred learning
- exercises to meet aim
- enables skills to be practiced
- enjoyable experience
- basis for further learning

Disadvantages
- availability of exercises
- require careful planning
- outcome difficult to predict
- depends on trainee attitudes
- needs good facilitator skills
Training Technique
CONCEPT OF ANDRAGOGY

Learning Outcomes:

- Identify basic characteristics of adult learners.
- Explain implications of Principles of Adult Learning in Training

We are aware of learning in general. But in a training situation, we deal with the learning of adults. It is different from the learning process of the children and teens. Most of the training institutions begin with the initial dominance of the teachers. They are guided by Pedagogy, the concept of child learning. In Pedagogic model, the teacher assumes responsibility for making decisions about what will be learned, and when it will be learned. The teacher directs learning based on the concept of education; that is the learner is looked upon as an empty vessel to be filled by the teacher with knowledge. This is not effective for adults. Malcom Knowles, in his book The Adult Learner: A neglected species presented a comprehensive adult learning theory. There is now an emerging theory of learning concerned with the technology of adult learning. This technology of adult learning has been given the name ‘Andragogy’. The word is derived from the Greek word ‘ANDRA’ (meaning ‘man’). Andragogy is therefore the art and science of helping adults to learn.

Malcom Knowles identified the following characteristics of adult learners:

Adults do not learn in the same way as children. This is because:

Adults are autonomous and self-directed.

Children enter this world in a condition of complete dependency. Their every need must be taken care of by someone else. The first image, children get of them is that of a dependent personality whose life the adult world manages for them.

This self-concept of dependency is encouraged and reinforced by the adult world. In fact, society defines the normal role of children as that of learners; this is their full-time occupation, the source of rewards and self-fulfilment. On the whole, this occupation, whether it is termed that of a pupil, student, or learner, requires a more or less passive role of receiving and storing information chosen by adults.

As children’s self-identity begins to take shape, they begin to see themselves as having the capacity to start deciding by them. This increases as they become more mature and experienced, leading towards greater self-direction. However, something significant happens to the self-concept when they consider themselves as adult. The adult acquires a new status, in his own eyes and in the eyes of others. She or he becomes essentially self-directing, and able to decide and face the consequences. In fact, the point at which a person becomes an adult, psychologically, is that point at which he perceives himself to be wholly self-directing.
Adults have accumulated a foundation of life experiences and knowledge that may include work-related activities, family responsibilities, and previous education. They need to connect learning to this knowledge/experience base.

Adults are relevancy-oriented. They are now performers. They see their normal role in society no longer as a full-time learner. They see themselves increasingly as a producer or doer. Their chief sources of self-fulfilment are now performance as a worker, a parent etc. They always see a reason for doing anything.

Adults are goal-oriented. Unlike children, adults set their goal in their activities. They are not interested in spending their time in any activity which will not help them to achieve something specific. They usually know what goal they want to attain. They, therefore, appreciate an activity where there are clearly defined elements.

Adults are practical. They are more concerned about improving their performance in their job. They may not be interested in knowledge for its own sake. Trainers must tell participants explicitly how the lesson will be useful to them on the job.

As do all learners, adults need to be shown respect. Trainers must acknowledge the wealth of experiences that adult participants bring to the classroom. These adults should be treated as equals in experience and knowledge and allowed to voice their opinions freely in class.

**IMPLICATIONS OF PRINCIPLES OF ADULT LEARNING IN TRAINING**

Adults are autonomous and self-directed

Therefore, adults have a need to be treated with respect, to make their own decisions, and to be seen and treated as unique individuals. They tend to avoid, resist and resent, situations in which they are treated like children - being told what to do, and being put in embarrassing situations. Adults are likely to resist learning conditions that conflict with their self-concept.

Adults need to be free to direct themselves. Their trainer must actively involve adult participants in the learning process and serve as facilitators for them. They have to be sure to act as facilitators, guiding participants to their own knowledge rather than supplying them with facts. Adult participants should be involved in the planning and design of the training course developed for them.

Often there is another factor in the self-concept of adults that affect their role as learners. They may carry from earlier school life the perception that they are, or are not, clever. This recollection of previous learning experiences may be so strong that it serves as a serious barrier to becoming fully involved in learning activities. Once a trainer puts adult learners into dependent roles, repeating in sense earlier school-based experiences, she or he is likely to face a rising resistance and resentment to the learning event created.
Adults have accumulated a foundation of life experiences and knowledge

Learners should be able to relate what is being studied to their personal/professional experiences. If you ask children who they are, they are likely to identify themselves in terms of who their parents are, where they live and what school they attend. Their self-identity is largely derived from external sources.

A somewhat modified response would be obtained from a person in their early twenties; the identification would be concerned with academic attainment, career prospects, outside interests and possibly an employer.

But to adults, particularly ones in middle age, their experience is themselves. They define who they are and establish their self-identity based on their accumulation of a unique set of experiences. So, if you ask adults who they are, they are likely to identify themselves with their occupation, where they have worked, travelled, and what their training and experience has equipped them to do, and what their achievements have been.

Because adults define themselves largely by their experience, they have a deep investment in its value. So when they find themselves in a situation where their experience is not being used, or its worth minimised, it is not just the experience that is being rejected, they feel rejected as a person.

These differences in experience between adolescents and younger and older adults have three consequences for learning:

a) Some adults have more to contribute to the learning than others; for most kinds of learning they are themselves a rich source.

b) Adults and, again, some more than others have a rich foundation of experience with which they will consider new experiences and their implications for work.

c) Adults have acquired many fixed habits and patterns of thought and, therefore, possibly less open-minded.

Adults are relevancy-oriented.

Adult must see a reason for learning. Learners should know why they are studying something. If they find that the present learning is not at all relevant to their work, they will withdraw themselves from the learning process. So, learning has to be applicable to their work or other responsibilities to be of value to them. This means, also, that theories and concepts must be related to a setting familiar to participants. This need can be fulfilled by letting participants choose projects that reflect their own interest. All the activities in training should be developed on the basis of their work or job assigned to them in their organisation.

Adults are goal-oriented.

So they will be interested to know their achievement if they participate in a training course. A training course having clearly defined aims and objectives of the training will attract an adult learner if they find that it is relevant to his performance. This will motivate learners and make them ready to learn. Participants must be shown how this training course in general and the session in particular will help them attain their goals. This classification of goals and course objectives must be done early in the course.
Adults are practical.

Adults are more concerned with their performance. Instruction should be task-oriented, and it should take into account the wide range of different backgrounds of learners. They are primarily concerned with the problem they are facing in their job situation. Adult learners are generally more interested in the solution of the problem rather than the content of it. So, instruction in training should be problem-centred rather than content-oriented.

In addition, adult learners need specific knowledge of their learning results (feedback). Feedback must be specific, not general. Participants must also see a reward for learning. The reward does not necessarily have to be monetary; it can be simply a demonstration of benefits to be realized from learning the material. Finally, the participant must be interested in the subject. Interest is directly related to reward. Adults must see the benefit of learning in order to motivate them to learn the subject.

In training the following issues are needed to be considered to have effective result:

* The physical environment should be one in which adults feel at ease, with furnishings that are comfortable and informal.
* The psychological climate should be one that causes adults to feel accepted, respected and supported.
* There should be a spirit of mutual respect and cooperation between the trainer and the learners, in which there is freedom of expression without fear of ridicule. A person feels more ‘adult’ in an atmosphere that is friendly and informal.
* The behaviour of the trainer probably influences the learning more than any other single factor. The trainer conveys in many ways his or her attitude of interest and respect for learners. The trainer, who takes time and trouble to get to know the learners individually and calls them by their first names, is promoting the right sort of atmosphere.
* Very important is the willingness to listen, respect, and respond to views expressed by learners.
* Because adults are themselves a rich source for learning, greater emphasis can be placed on techniques that use their experience. Training methods such as group discussions, case studies, in-tray exercises, and action learning, promote participation in a learner-centred environment.
* Assist the learners to define their learning needs.
* Design learning to suit an individual learner’s entry behaviour
* Help the learner to understand how to use learning resources, including the experience of sharing their learning experiences with others.
* In selection of learning method, emphasise on experimental and participative training methods. This has been discussed in detail subsequently.
* Assist learners to assume increasing responsibility for planning their own learning.
* Reinforce the self-concept of the learner to encourage achievement of objectives.
* Encourage the use of formative assessment techniques, including free exchange of feedback.
How Trainees Learn: Its Implications for Conducting Training in India

Pradip Bhattacharya, I.A.S.
International HRD Fellow (Manchester)

Introduction

The way in which we train people seems to be determined significantly by our own beliefs about teaching. These beliefs, in turn, shape the natural training style of an individual trainer, and are themselves the result of the ways in which the trainer himself has learned. In this essay I propose to begin by taking a look at how I and some other trainers have learned, since it is our experience that our assumption and experiences regarding learning are apt to be extrapolated on to our trainees. Next I shall examine if there is any dissonance between these assumptions about how our trainees learn and how they actually seem to learn as seen from the feedback we receive. From here, I shall attempt to find out the learning assumptions underlying the training system as it is being administered and conducted in the National Academy of Administration, India. If these assumptions are found to differ materially from my findings regarding how our trainees actually learn, we will need to ask ourselves what the implications of this are.

How some Trainers learn

It is useful to look at the significant learnings one has had by utilising a systemic table which breaks up the learning into components. In the course of a workshop trainers from India, Nepal, Thailand and Bangladesh numbering five in all, examined their significant learning experiences under four heads: the Event, the Effect (i.e. what was learnt) the Process (i.e. what the learner was doing at that time) and the Feelings of the learner during that event. I reproduce below the data generated by the five trainers, including myself. They are indicated by different alphabets.

<table>
<thead>
<tr>
<th>TRAINER</th>
<th>EVENT</th>
<th>EFFECT</th>
<th>PROCESS</th>
<th>FEELINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SELF</td>
<td>1. Joining college</td>
<td>Value of own choice of subjects</td>
<td>Filling in application form</td>
<td>Exhilaration</td>
</tr>
<tr>
<td></td>
<td>2. Staging a play</td>
<td>Confidence in commanding audience attention</td>
<td>Speaking &amp; moving on stage</td>
<td>Joy &amp; satisfaction</td>
</tr>
<tr>
<td></td>
<td>3. Birth of 1st child</td>
<td>Heavy responsibility of parenthood</td>
<td>Waiting</td>
<td>Anxiety</td>
</tr>
</tbody>
</table>
What can we infer from this list of the significant learning experiences of five trainers from different countries? As far sources of learning are concerned we can conclude that these are widely varied. More important, they need not necessarily relate to the work situation. We cannot ignore the significance of this when we consider that the trainers giving these responses have been in government service from four to fifteen years. Unplanned life experiences, therefore, are seen to provide significant learning for trainers. These sources of learning feature as serials 4, 5 and 9 in the nine categories of learning sources found by Burgoyne and Stuart, a result of their research into the important sources of managerial learning.2 These nine categories are:—

1. Doing the Job: picking up skills as they go along.
4. Living: learning from the experiences of out-of-work activities.
5. Self: through reflection, introspection and self assessment.

<table>
<thead>
<tr>
<th>TRAINER</th>
<th>EVENT</th>
<th>EFFECT</th>
<th>PROCESS</th>
<th>FEELINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>“P”</td>
<td>4.</td>
<td>Reflecting on interview</td>
<td>Mistakes made</td>
<td>Walking to a temple and thinking</td>
</tr>
<tr>
<td></td>
<td>5.</td>
<td>Criticising others</td>
<td>Criticising is not good</td>
<td>Self-evaluating</td>
</tr>
<tr>
<td></td>
<td>6.</td>
<td>Success in examn.</td>
<td>Hardwork brings good results</td>
<td>Reading &amp; writing</td>
</tr>
<tr>
<td>“J”</td>
<td>7.</td>
<td>Cooking soup</td>
<td>Independence in doing things myself</td>
<td>Reading &amp; experimenting</td>
</tr>
<tr>
<td></td>
<td>8.</td>
<td>Writing articles</td>
<td>Communicating systematically with others</td>
<td>Asking questions, thinking, gathering information</td>
</tr>
<tr>
<td></td>
<td>9.</td>
<td>Singing in public</td>
<td>How to make others happy</td>
<td>Imitating others</td>
</tr>
<tr>
<td>“S”</td>
<td>10.</td>
<td>Getting first job</td>
<td>Duty to support family</td>
<td>Thinking</td>
</tr>
<tr>
<td></td>
<td>11.</td>
<td>Passing examn.</td>
<td>How to achieve goals</td>
<td>Studying &amp; writing</td>
</tr>
<tr>
<td>“R”</td>
<td>12.</td>
<td>Taking first examn.</td>
<td>Knowledge &amp; expertise are needed for good results</td>
<td>Studying &amp; writing</td>
</tr>
<tr>
<td></td>
<td>13.</td>
<td>Parents’ death</td>
<td>Reality of death as inevitable</td>
<td>Consulting doctors</td>
</tr>
</tbody>
</table>
6. Doing non-managerial jobs prior to taking up a managerial role.

7. Media: newspapers, books, professional journals, radio, TV etc.

8. Parents: home background, upbringing and guidance.

9. Innate learning: gained from the potential existing in an individual, usually genetically predetermined.

If this is “from what” trainers and trainees learn—in our case 11 trainees being managers in the public sector—the next area to look at is “how” they learn, i.e. the processes. From table 1 it will be apparent from the third column that the ways of learning are nearly as varied as the sources themselves: doing things, storing information, introspecting, etc. It is significant that both active and passive roles are involved in the learning process. It is, therefore, important not to discard the passive learning model hastily when planning training courses. These learning processes are seen to fit into the seven categories identified by Burgoyne\(^3\) of how learning associated with managerial competence comes about:

1. Modelling: copying or imitating a “respected other”.

2. Vicarious discovery: observing the actions and behaviour of others, the consequences of that behaviour and acting accordingly in similar situations.

3. Unplanned Discovery: experiences at work, trial and error learning.

4. Planned Discovery: going into situations with the deliberate aim of learning from experience.

5. Being “Taught”: told or shown an approach or idea etc.

6. Discussions: the sharing of information, ideas, feelings and experiences.

7. Storing of information: remembering data, facts during course of events.

There are, however, two more types of learning processes, which Temporal\(^4\) has rightly highlighted: Coaching and Organisational Climate.

What are the implications of the learning processes outlined in Table 1? In the first place, we find that a considerable amount of learning takes place in an unplanned or “non-contrived” manner. In the second place, the feelings associated with these processes, as listed in column 4 of Table 1, suggest that learning can take place through pleasant as well as unpleasant, exhilarating as also painful, processes. As trainers, I find that we tend to assume that a trainee learns best only if the feelings associated with the process are pleasant, and if the process involves an active role for him. On the other hand, the data available in Table 1 brings out that this is not the whole truth. Hence it becomes necessary for us to keep in mind consciously while planning training courses, that like ourselves the trainees are likely to learn from passive and unpleasant experiences too. Thus, the range of training interventions available to us becomes wider and greater flexibility is obtainable.

Let us now attempt to summarise what we have found so far about how our trainees might learn, based upon our findings of how some trainers learn. The four-stage experiential learning model of Kolb has been modified by Boydell\(^5\) and further altered by Temporal\(^6\) while keeping to the basic four-stage structure. This is Temporal’s model which I find most suitable to what has been presented so far:
This Learning Cycle can be entered at any of the four stages and can be deviated from at any point into a non-developmental path. Learning can take place at any of the four stages. It is possibly internalised the most if the cycle is completed. As Confucius said:

“I hear and I forget...
I see and I remember.
I do and I understand.”

In modern terminology, this has been called “learner retrospective learning” by Thomas and Harri-Augstein, as opposed to “teacher original teaching”.7

How the Trainees Learn

In discussing how our trainees learn, the scope will not be restricted to the learning merely within the training courses, for such courses occupy a very small proportion indeed of the trainee’s working career. I shall take the learning to include his professional experience. This does not mean that I am discounting the importance of the purely personal life-experiences such as those which have been mentioned earlier in table 1.

Who are these trainees? In the National Academy of Administration, India, they fall into two broad categories: the fresh inductees into the higher civil services and the in-service officers ranging from those with six years to those with twenty years of service in government. This means an average of about 700 trainees in different courses every year. To keep the discussion within manageable limits, we will restrict our investigations to one of these two categories: the fresh inductees into the Indian Administrative Service (I. A. S.), numbering about 125 annually.

One way of finding out how the I.A.S. trainees learn is to look at the formal feedback we collect from them by administering an end-of-the-course evaluation questionnaire. As part of this, they are asked to mention what they feel have been the strong points of the six to eight weeks course. In the August 1982 evaluation, the following were mentioned as the strong points:

1. District Experiences Presentations by trainees.
2. Seminar on “How to be an effective Sub-divisional Officer”.
3. Exercises in Criminal and Civil Law.
4. More discussion oriented small group sessions.
5. Management games (Prisoners’ Dilemma, NASA, Box-making etc.)
7. Tutorials & discussions on Civil Liberties.
8. Case Study method.
9. Lectures of Joint Director on office administration.
10. Inputs on rural development administration.
11. Films like “Bara,” “Thanneer” etc.
12. Camaraderie and cordiality.

These sessions seem to fall into three categories:

(a) those relating immediately to the job the trainee would take up at the end of the course viz. sls. 2, 3, 9 & 10;
(b) those involving active participation on the trainees' part, viz. sls. 1, 4, 5, 6 & 8;
(c) those which neither relate immediately to the job, nor call for active participation necessarily, but touch highly emotive socio-economic and cultural issues, viz. sls. 7, 12 and 11 (films on exploitation of tribals etc.)

What are the implications of this data in terms of the second part of the question we are answering? I propose that these seem to imply the following:

(a) the trainees seem to value learning what they perceive to be of immediate relevance by way of professional knowledge and skills for the job they will be taking up. This appears to be a strong motivating factor for learning even where a trainer-centred method like lecturing is adopted, as in the case of sls. 8, 9, 10 of the list above, and the trainee’s is a relatively passive role.

(b) Even where the relevance may not be so immediately relevant, learning by doing seems to be valued, as with sls. 3, 5, 6.

(c) Sessions which call for active participation by the trainees are valued, e.g. sls. 1, 2, 4, 8.

(d) Where the topic arouses strong feelings, or the media used provides a “total” experience (as in films), the trainees get strongly involved even if the feelings are unpleasant as in sessions on police brutality, bureaucratic callousness etc.) and a vicarious learning appears to take place, which is valued by them on account of the strength of the feelings aroused.

If we look at these implications in terms of the learning cycle model, we can place (a) above at stage 3, i.e. Ideas, concepts, theories. From this cognitive input the trainee sees what he can expect when he takes up the job and he may formulate an action plan, thereby going on to stage 4 of the cycle, and subsequently perhaps complete the full cycle. The second implication, (b) above, is at stage 1 of the cycle, viz. experience/event. As trainers we attempt to follow this up with sessions in which the trainees are encouraged to proceed to stages 2 and 3. Some of them even come up with stage 4 (action plans) and thus complete the learning cycle. The third implication, (c) above, is also an experience, though of a less intense variety than (b), perhaps emphasising more stages 2 and 3, i.e. exchanging observations, thoughts coming up with new solutions of problems. The last one, (d) above, can be
either at stage 1 as when watching a strongly emotive film (which becomes a vicarious experience) or at stage 2 when a discussion follows such a film to tease out its implications.

It is also evident that these findings regarding how the trainees learn fit into the categories of learning processes enumerated earlier. “Modelling” takes place when the trainee adopts the problem-solving style of a trainer for his own situations. “Vicarious discovery” is often seen to form part of the exchange of experiences which takes place in the district experiences presentations and the seminar on how to be an effective SDO. “Unplanned discovery” takes place in the course of the management games they are taken through. “Planned discovery” is part of the case study method, as the trainees know in advance the text and what is expected from them during the session. Direct pedagogic teaching is there in lectures and tutorials. “Discussions”, as on civil liberties and as a follow-up of all the management games and exercises, are yet another learning process. “Storing of information” naturally takes place during all these sessions and is tested in the final examination. “Coaching” forms an important learning process as well, as every trainee has a particular trainer assigned to him as Counsellor to assist him in personal and professional problem-solving. Finally, there is the “organisational climate” of the institute which seeks to practise the principle of reflexivity, i.e. to practise what it preaches in administrative ethics and efficiency.

But are these the only inferences we can draw about how our trainees learn? As part of the 1982 evaluation already referred to for our examination so far, the trainees had been asked to list what they thought they had gained from the course. Here are the common points mentioned by them:

1. Growth through interaction with trainees, faculty and panelists on seminars The variety of responses to situations in District Experiences Presentations and the SDO Seminar led to a broadening of vision and availability of numerous options for decision.
2. Problems were indicated, different styles of handling them were shown and solutions were rightly left to trainees to decide.
3. Old friendships were strengthened and new ones made. Fond memories of the Academy and of the people there.
4. Clarity regarding our role as bureaucrats.
5. Individual experiences were moderated in the light of those of others. An all-India awareness was achieved.
6. Broke the cynicism accumulated in district training, boosted morale by clearing doubts and showing possible solutions to problems.
7. Culmination of a process of developing values which began in the Foundational Course.
8. Theoretical perceptions of earlier training became clearer.
9. The campus life.
10. Confidence to hold charge of a sub-division.
11. Valuable practical tips on tackling corruption, tackling pressures, management of records and of subordinates.
12. An opportunity to reflect on the values of service.

Final Proof
Interestingly enough, nearly all the “gains” mentioned relate to the affective domain, the feelings area. The emphasis is consistently on the “process” aspect, rather than the cognitive. This is a finding which recurs in the evaluations of the 1979, 1980 and 1981 courses as well, while the rating of the cognitive inputs fluctuate widely from course to course.

What is the implication of this in terms of the second part of the question we are answering? This list of “gains” from the course appears to validate what Candy writes about teaching in terms of Kelly’s Theory of Personal Constructs:

“Teaching is not so much the passing on of established Truth as offering ideas and experiences to be accepted or rejected by the individual learner according to his/her hypotheses and expectations.”

Indeed, serials 1, 2 and 6 above virtually say the same thing as Candy has written. An important inference from this is that this process by which the trainees learn, and what they value in the learning, must be understood for formulating an effective training programme: “Training, therefore” continues Candy, “has as its primary focus, an attempt to understand the construction systems of learners”. If the trainer neglects to do this, he may very well find that the trainees’ personal constructs have become barriers to learning, for the trainer would have proceeded purely on the basis of the paradigm of his own belief-and-behaviour model without taking into account that of the trainees.

Another critical factor in administering and conducting a training programme is the barriers to learning, one of which could be the learner’s personal construct as mentioned above. These blocks to learning have been split into six categories by Temporal namely:

1. Perceptual, where the trainee is unable to perceive the problem. For instance the IAS trainee might not perceive caste distinctions as a problem. In terms of Transactional Analysis (T.A.) this is known as a first degree Discount: If the trainee cannot see the problem, he cannot solve it.

2. Cultural, where the trainee will not use a range of behaviours because of his cultural norms. For example, the IAS trainee may not oppose an illegal order passed by his superior because of the bureaucratic culture of hierarchy and the annual confidential report.

3. Emotional, where the trainee feels insecure and therefore is reluctant to act on his ideas. For instance, the IAS trainee may believe that all men are equal, but would not like to stay in an untouchable’s hut or share his meal because of an emotional repugnance at the lack of cleanliness. I have known cases where the trainee has been reluctant even to visit an untouchable colony for apprehension that he may be offered some refreshment there, and he is unsure how he would respond in such a situation. This is a 2nd degree discount in T.A. terms: He knows what to do but is afraid of doing it.

4. Intellectual, where the trainee lacks the mental competence to resolve the situation, Paulo Freire calls this the “Semi-intransitivity of consciousness” in his Pedagogy of the Oppressed. We notice this among some trainees who have been educated only in their regional languages and are totally at sea in classes on Management, as there are no vernacular equivalents for the management terminology as yet. To them management becomes a mysterious thing, not to be used as a problem-solving tool, except by calling in the management expert who, to them, is like a magician using inexplicable abracadabra to produce results.

55
5. Expressive, where the trainee possesses poor skills of communication. For instance, the trainee does not ask for explanations of what he has not followed because he feels he is unable to express his needs adequately.

6. Environmental, where the organisational climate inhibits exploring new learning opportunities. For example, the entire bureaucratic environment itself is geared not towards management of change and of conflict, but towards preservation of status quo ante. Trainees naturally are chary of trying out any novel ideas in such an environment.

The implications of these barriers to learning appear to be that the trainee must be helped to overcome these, as much as the trainers themselves need to conquer these so that they can go on learning too. The first step in this is to get them to identify and “own” their learning blocks, and design activities to overcome them. This can be helped to a considerable extent by bringing them to learn how to learn. An example of this can be seen in the data gathered on how five trainers have learned significantly. The important thing to keep in mind from that data is that learning is an activity originating from a wide variety of sources and takes place through multifarious processes involving a broad spectrum of feelings.

The question which arises now is: does the training we impart in the National Academy of Administration recognise these barriers to learning? What are the assumptions it makes about the way in which the IAS trainees learn? These are questions directly related to the second part of the essay-question. In the first place, I do not find any attempt to carry out a formal training needs identification for the trainees. What happens is that a syllabus is available and it is taught. The teaching method at its worst can be wholly trainer-orientated, as in lectures, and at best it moves occasionally towards learning-by-doing, with some participative methods thrown-in in-between. What is the feedback we receive by way of complaints from our trainees? These are about poorly prepared, boringly delivered lectures, the impersonality of large classes, adherence to the letter of the law, irrelevant and outmoded syllabi, emphasis on traditional examinations which test only formal rote learning, and stress on teaching instead of learning. Interestingly enough, these are, almost verbatim, the complaints about teaching in universities today listed by Norman Mackenzie. It seems, therefore, that our training of civil servants is proceeding along lines of pedagogic teaching in universities and not andragogical learning of adult managers. As a matter of fact, Mackenzie’s statements about the assumptions underlying the recruitment of academic staff can be paraphrased to apply to the inductees to the Indian Administrative Service (I have placed my modifications of the original in brackets): —

“It is generally assumed that outstanding academic performance, as an undergraduate, coupled with a period of supervised (attachments), is necessarily correlated with the skills, or even the personality factors, required of (administrators). The result is the recruitment of (trainees) who are somehow expected to acquire by experience a wide range of competencies... The remarkable feature of this system...is not that it is done well, but that it is done at all.”

56

Final Proof
What we find from this is that the assumption underlying the existing training system in the institute is pedagogic, whereas our findings earlier on in this essay about how the trainees learn indicates that an andragogic approach is also called for. Lynton and Pareek in 1967 had described these differing approaches as “the prevailing concept of training” and “the new concept”. It is worthwhile to give details of these concepts:—

The prevailing concept

1. The acquisition of subject matter knowledge by a trainee leads to action.
2. The trainee learns what the trainer teaches. Learning is a simple function of the capacity of the trainee to learn and the ability of the trainer to teach.
3. Individual action leads to improvement on the job.
4. Training is the responsibility of the training institution. It begins and ends with the course.

The New concept

1. Motivation and skills lead to action. Skills are acquired through practice.
2. Learning is a complex function of the motivation and capacity of the individual trainee, the norms of the individual trainee, the norms of the training group, the training methods, the behaviour of the trainers and the general climate of the institution. The trainees’ motivation is influenced by the climate of the work organization.
3. Improvement on the job is a complex function of individual learning, the norms of the working group and the general climate of the organisation. Individual learning, unused, leads to frustration.
4. Training is the responsibility of the trainee’s organisation, the trainee and the training institution. The pre-training and post-training phases are of key importance to the success of training.

In our discussion we have found that it is the new concept which appears to apply more to our trainees, as seen from their feedback. This fits into the Theory of Andragogy propounded by Malcolm Knowles. He specifically pinpoints how the assumptions behind pedagogy and andragogy differ, as also how the designing of the programmes will differ:

<table>
<thead>
<tr>
<th>AS U M P T I O N S</th>
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<tbody>
<tr>
<td><strong>Pedagogy</strong></td>
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<tr>
<td>Self-concept</td>
</tr>
<tr>
<td>Experience</td>
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<tr>
<td>Readiness</td>
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<tr>
<td>Time perspective</td>
</tr>
<tr>
<td>Orientation to</td>
</tr>
<tr>
<td>Learning</td>
</tr>
</tbody>
</table>

57
This model seems to oppose the two concepts much in the same manner as Paulo Freire does with his criticism of the ‘banking system’ of education which creates a “massified society” the centres of whose economic and political decisions are outside it, as opposed to the problem-posing system of education which he calls “conscientization” which results in praxis, whereby the learner becomes the subject of his environment instead of remaining a passive object.

However, what we have noticed in our discussion of how our trainees learn is that they value both the passive as well as the active learning roles. What I propose, therefore, is that it is not much of a dichotomy from pedagogy to andragogy, a development from “massification” to “critical consciousness”, from “activism” to “praxis”. The implication of this for our training programme is that depending on the nature of the topic, it may very well be a viable and relevant method to take recourse to the standard pedagogic system. Often this makes for the most economical use of very scarce time available, so that the rest of the time can be devoted to using experiential learning and andragogical training methods. In other words, as we had concluded, this provides us with a wider range of training interventions and greater flexibility for adjusting to the environmental demands, than if we rejected one concept and chose merely the other.

To sum up, we have found, therefore, that a dissonance does seem to exist between the way the trainees actually learn and the pedagogic assumptions on which much of the training is based. The fact that the trainees’ feedback indicates they valued certain cognitive inputs delivered pedagogically, may indicate that in some cases the trainer-orientated approach may be effective. From their feedback we have also found that they highly value the affective part and the experiential learning portions of the training, and have described these as their “gains” from the course.

From this it might be rather simplistic to jump to a solution like what Rousseau proposes in his Emile: “Teach by doing whenever you can and only fall back on words when doing is out of the question.” I would suggest that the answer might lie in keeping as many options open as possible, in looking at the range of training interventions available as a continuum moving from the trainer-orientated to the learner-orientated as is happening in the National Academy of Administration in India today. The dilemma we seem to face as trainers of civil servants is perhaps best exemplified in the words of R. D. Laing:

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**DESIGN ELEMENTS**

<table>
<thead>
<tr>
<th>Climate</th>
<th>Authority oriented, formal competitive</th>
<th>Mutuality, respectful, collaborative, informal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>By teacher</td>
<td>Mechanism for mutual planning</td>
</tr>
<tr>
<td>Diagnosis of needs</td>
<td>By teacher</td>
<td>Mutual self-diagnosis</td>
</tr>
<tr>
<td>Formulation of objectives</td>
<td>By teacher</td>
<td>Mutual negotiation</td>
</tr>
<tr>
<td>Design</td>
<td>Logic of subject-matter; content units</td>
<td>Sequenced in terms of readiness; problem units</td>
</tr>
<tr>
<td>Activities</td>
<td>Transmittal techniques</td>
<td>Experiential techniques</td>
</tr>
<tr>
<td>Evaluation</td>
<td>By teacher</td>
<td>Mutual re-diagnosis of needs, mutual measurement of programme.</td>
</tr>
</tbody>
</table>

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“He does not **think** there is anything the matter with him because

One of the things that is
the matter with him
is that he does not think
that there is anything
the matter with him

therefore
we have to help him realize that,
the fact that he does not
think there is anything
the matter with him
is one of the things that is
the matter with him”

References

4. Temporal, Paul: op. cit. p. 95
6. In a personal communication to the writer.
7. Referred to in Candy op. cit. p. 40
8. Candy op. cit. p. 78
9. ibid.
13. ibid p. 41
15. Knowles, Malcolm: *The Adult Learner, a neglected species* (Gulphpub. 1978) p. 110
CONCEPT OF FEEDBACK

Learning Outcomes:—

Knowledge acquired through this module will allow the participants to:-

🔹 Explain the concept of Feedback
🔹 State the value of Feedback
🔹 Discuss the guidelines for Giving Feedback
🔹 Discuss the guidelines for Receiving Feedback

Feedback is a very important concept. It is useful in your personal life, in our job and in the training environment. Feedback provides you valuable information about your performance.

WHAT IS FEEDBACK?

The “Glossary of Training Terms” defines Feedback as:

“The process by which information about the results of an action is communicated to the source of the action. It is argued for example, that learning takes place either through the informational characteristic or the reinforcing characteristic of the knowledge of results, or through a combination of both”.

You need feedback for improvement in your performance.

The source of feedback can be from your family members or other people as comments from other trainees, or from trainers as the case may be. However the performance of a task itself provides another source of feedback. You do not need a trainer to tell you that you have fallen off a bicycle, and you know from the taste whether you have put too much sugar in a cup of tea. The extent to which we received feedback is a significant factor in the standard of our performance.

Feedback helps us to learn about ourselves and the effect of our behaviour on others. However, feedback is only helpful when it is accepted and used by the recipient. It can take the form of either positive or negative feedback. Positive feedback confirms and praises acceptable performance. This builds confidence and motivates the receiver to repeat the performance. Negative feedback identifies areas where performance is inadequate. It can be of great value to the recipient if it creates an awareness of the need to change. The danger with negative feedback is that the recipient may reject it, as in many cases he may not be able to take in right spirit. So there are some golden rules of giving and receiving feedback.

VALUE OF FEEDBACK

Providing feedback therefore needs to be a constructive activity that should be helping to learn. It should not be destructive and critical. Equally important, the recipient should not interpret it as destructive and critical.

To be effective, feedback needs to be skilfully given and the receiver must hear, understand, accept and act upon it. How accurate the feedback, if the trainees reject it, the result will be no improvement in performance. Therefore, always consider the human element during feedback.
H - Hear
U - Understand
M - Motivate
A - Acceptable
N - Negotiate

The giving and receiving of feedback are skills which require very careful handling. They require courage, tact, honesty, understanding and respect – both for yourself and for others. Like all other skills, they are developed only through practice. In providing feedback to others you will need to be sensitive to the feedback you will receive in response. The giving of feedback cannot be separated from receiving it in return.

GUIDELINES FOR GIVING FEEDBACK

You are giving a feedback to some one in his/her performance. Your intention must be to improve performance through your feedback.

You are teaching mathematics to your children. If he/she makes any mistakes our normal feedback is as “you are an ass, you are useless”. But think for a minute. What has he/she done? He/She has made some mistake in one or two steps in a particular sum, on the other hand, your intention is to improve his/her performance in doing sum. But unfortunately, you are focusing on Personality instead of behaviour which is comprised of knowledge, skill and attitude.

Focus Feedback on behaviour rather than on personality

Referring to what the person did is important so that feedback is descriptive rather than evaluative.

Changing behaviour is quite possible for an individual, but attempting to change personality is much more difficult, if not impossible. We create frustration if we give feedback on some shortcoming over which the trainee has no control – i.e. part of their personality.

Feedback should focus on observations rather than inferences.

Observations are what you can see and hear in a person’s behaviour; inferences are the interpretation and conclusions you draw from the observations. Consequently they are open to dispute. The giver of feedback can accurately report what he or she observed as happened, but can only guess at the reason. To say, for example, ‘You have interrupted three people during the last half-hour’, is more acceptable than saying ‘You are too fond of your own voice’. You can observe or measure the amount of talking someone does and give accurate feedback on it. Nevertheless, it is dangerous and may be untrue to imply that someone who talks a lot is too fond of one’s own voice. There could be other reasons why they say a lot.

Concentrate on change rather than make value judgements

Having identified an area for change you may hope the trainee explore how to do things differently in the future. Make positive suggestions about how things could be done differently. However, avoid being manipulative. Remember to leave the choice to the trainee about whether to accept or reject the feedback.
Feedback is most acceptable when it is describing specific rather than general patterns of behaviour.

In providing feedback you are seeking to help the trainee to change and improve performance. You need the trainee’s commitment to change, not agreement with your views. So you identify the specific problem. Suggest the solutions. Do not confuse him by describing general patterns of behaviour.

**Focus the feedback on the value it may have for the trainee**

You should try to be impersonal, and show empathy by asking yourself: ‘Who is it I am trying to help?’ It is tempting to give feedback about things of interest to you that are not strictly about the trainee’s performance. Concentrate on those things that will help achieve the desired performance.

**Focus feedback on the amount of information the trainee can use, rather than the amount you feel capable of giving.**

Effective feedback requires you to select the relevant points that the trainee can cope with at once. This means you must select priorities in the feedback you can give. Concentrate on the major determinants of the performance you are assessing. Make the feedback learner centred.

**Feedback should be well-timed**

Generally, feedback is best given as soon as possible after the learning event. If we delay feedback, it is much more difficult for a person to learn which actions led to a successful (or unsuccessful) outcome. Delay in feedback may make the feedback ineffective. You should give it timely.

**Check the accuracy of the feedback**

Careful observation of the person’s behaviour during his or her performance is essential. Some form of checklist would help. However, always remember that ticks in boxes are secondary to helping the trainee to learn. The checklist is a means to an end, not an end in itself.

In giving feedback you should be helping trainees explore the options open to them in deciding if and how to change. The trainees need to work out for themselves what they want to do rather than be given off-the-shelf solutions.

For successful learning to take place, by using feedback, there must be commitment to change, not compliance with the views expressed by the feedback giver. The feedback giver should be working to get that commitment. Compliance is unlikely to lead to action to improve performance.

Effective feedback resulting in commitment to change and the implementation of feedback requires skills in receiving feedback and also giving it. No matter how skilfully given, feedback that the trainee cannot be effective.

**GUIDELINES FOR RECEIVING FEEDBACK**

**Be positive towards the feedback giver**

Giving feedback on performance is a threatening activity, particularly for the less experienced. Recognising the benefit to you of the feedback you will receive, and signalling your appreciation, will encourage the person giving it. Eye contact, nods and other nonverbal signals will encourage the feedback. Negative response, or no response at all will reduce the feedback you get.
Listen to the feedback

This is easy to say but difficult to do because of the temptation to deny, argue for and justify what you have said and done.

Clarify and check understanding

Feedback givers may express themselves badly or you may not quite understand their points. Check out what feedback you are getting by paraphrasing back to them your understanding of the main points.

Check the feedback with others

Don’t accept one individuals feedback as absolute. Check with others to see whether they agree on areas identified for change and the possible ways of implementing change.

Ask for feedback not volunteered

If areas of your performance concern you and you receive no feedback on them, ask. In some situations you can ask the feedback giver to pay special attention to particular points before observing your performance. There may be one aspect of your performance that you are concerned about and seeking information on it is quite legitimate.

Describe how to use feedback.

It is up to you to decide whether you accept or reject the feedback. Whether the feedback is positive or negative, you must decide if you need to change your performance and how you might implement any change.

Explore Options

Having identified an area for change you should explore ways of bringing the change about. This may be done in consultation with the feedback giver, on your own or with someone else who can advise you. You must be committed to the decision you make for introducing change.

Thank the feedback giver

Even when you judge the feedback you have been given was unhelpful you should thank the person. For feedback to continue to be given the trainee needs to signal its value. The next time feedback is given it may be very helpful. Punishing the feedback giver or signalling your discontent will just reduce or eliminate feedback being given.

SUMMARY

Giving and receiving feedback is a demanding process that requires confidence and respect between the parties involved. The advice offered is necessarily broad and will vary between different individuals and activities. We cannot doubt the value of the feedback in learning. The provision of feedback is especially important for those process skills that occur during learning activities, particularly involving interpersonal skills.
GIVING FEEDBACK CHECKLIST

1. Must be acceptable to the receiver.
2. Focus on behaviour rather than on the person
3. Base feedback on facts and not on opinions
4. Should include observations not inferences
5. Concentrate on change rather than make value judgements
6. Most acceptable when describing specific rather than general patterns of behaviour
7. Focus feedback on the value to the receiver
8. Limit feedback to what the receiver can cope with
9. Timing of feedback is important
10. Check the accuracy of the feedback

RECEIVING FEEDBACK CHECKLIST

1. Be positive towards the feedback giver
2. Listen to the feedback
3. Clarify and check understanding
4. Check the feedback with others
5. Ask for detail not volunteered
6. Decide how to use feedback received
7. Explore options
8. Thank the feedback giver
How to prepare for & conduct an Interactive Session

**Learning Outcomes:**

Knowledge acquired through this module will allow the participants to:

- Explain stages involved in preparing an Interactive session
- Set objective of a session
- Prepare an interactive session to fulfil the objective.
- Run an interactive session

Confucius said:

"I hear and I forget,
I see and I remember
I do and I understand."

Lectures have been used since ancient times as a convenient method of communicating information to a large number of people. Convenience, however, is different from efficiency. Lectures are somewhat like primitive steam engines in that they provide a means of delivery, but one that is not particularly efficient as it proceed on the assumption that the audience are empty vessels to be filled up with knowledge. This is especially true when a lecture is being used to communicate information that people need for performing-on-the-job. With modern technology, we can improve the efficiency of a steam engine considerably to make it a viable option for motive power. The same applies to lectures, because they too can be transformed by making use of a better understanding of how adults learn and by using visual aids.

First we shall concentrate on how to prepare an interactive session. Then we shall discuss how to conduct an interactive session using lecture to initiate the session.

**STAGES INVOLVED IN PREPARING AN INTERACTIVE SESSION**

We list the process below which we shall follow. We recommend that you prepare the session by developing each of these stages in turn, although you may find that you have to go back to modify earlier stages as you work through the process.

- **Objective of a session**
- **Entry Behaviour**
- **The Learning Event**
- **Deciding the Content**
- **Planning the Sequence**
- **Planning for Maximum Recall**
- **Structuring the Session use of Visual Aids**
- **Performance Assessment**
- **Review**
- **Feedback**
THE OBJECTIVE OF AN INTERACTIVE SESSION

When you are organising an interactive session, your purpose is to enable trainees to utilise the knowledge you will share with them, which they require to perform on-the-job. The objective is a logical starting point for it. Use the session as a means of communicating information and to sharing knowledge only. This means that you need to specify two things in the objective - what the trainees can do after the session and how they are going to check that they can. In setting objective, you should phrase them in achievable and measurable terms, such as ‘state’, ‘describe’, ‘list’, ‘explain’ and so on.

ENTRY BEHAVIOUR

Much of the success or failure of your session will depend on the trainees. Consideration of their entry behaviour will enable you to plan a session that is effective for them, enabling the trainees to achieve the objective and preparing them for further learning events. The following points about entry behaviour need to be considered:

— The trainees’ existing knowledge and previous learning experience. Remember that no adult is an empty vessel to be passively filled up. Awareness of existing knowledge will help you decide where your session will start, and the assumptions you can make about previous learning. Awareness of previous learning experiences will also alert you to the trainees’ likely attitude and willingness to learn.

— Individual differences between trainees. If your session is to be given only to one trainee, you can match your session to the trainee. You would sense the trainee’s response to your explanation and adjust accordingly. As the learning group grows in number and individual differences in entry behaviour arise, it becomes more difficult to adjust your session to suit everyone’s entry behaviour. Prior knowledge of the trainees should enable you to prepare a suitable and, therefore, a more effective session.

Acceptability of the Information

Acceptance or rejection of the information you are providing in your session is likely to be between two extremes. The information may be accepted if you have explained to the trainees the reason why they need the information and it is new, interesting and does not conflict with their existing knowledge or opinion. Occasionally you may find yourself, possibly unwittingly, focussing more on trainees rejecting or questioning or not responding to your information. This is likely to occur when you are dealing with contentious information, going ‘over’ or ‘under’ their heads, or making the session difficult to understand by using a poor structure, inappropriate lecturing technique, or poor visual aids. The essential point to consider is that you are going to deal with a group of trainees, possibly unknown to you, whose approach to learning may not be in accord with your assumptions. The likelihood of acceptance or rejection may depend on your sensitivity to their entry behaviour.

The maturity of the trainees will affect the way you discuss the subject and may also influence how you assess achievement. An assessment measure for younger trainees might be by means of a written test; the same test given to older trainees might be threatening and harmful to their willingness to learn.
Your credibility to the trainees, or your perceived status as the provider of information. Are you likely to be accepted as an ‘expert'? They might expose your credibility generally during a session and prior information about entry behaviour should enable you to avoid the worst of the pitfalls awaiting the unwary, insensitive session.

**Flexibility**

Try to build into your session some degree of flexibility. This is difficult with a large group of trainees, but often encouraging when some interaction is possible. Trainees appreciate relevant anecdotes and similar means of adding variety and interest. Mature trainees may want to participate by sharing experiences, discussing interesting points in relation to their work, and generally wishing to be treated as equals. The more formalised and structured the session becomes, the more difficult you will find it to adapt and cater for these situations, most of which you should encourage. Where possible allow time to check entry behaviour by encouraging trainees to participate and express themselves.

**THE LEARNING EVENT**

The learning event is the ‘live’ occasion when you are conducting your session and communicating to your trainees. You will help their learning if they know:

- Where they are going
- How they are going to get there.

The first point has been covered because the objective of the session tells them where the session is going and what they are expected to achieve when they get there. The second point, how they are going to get there, is dealt with by considering the following aspects of the learning event you are preparing:

- Deciding the content
- Planning the sequence
- Planning for maximum recall
- Structuring the Session
- Use of Visual Aids
- Preparing Session’ Notes

**DECIDING THE CONTENT**

The objective for your session, should give a clear idea of information you need to communicate. However, in such a short statement it will have left unstated the many small items of information that might or might not be included. A useful technique to identify these items is the use of the ‘spray diagram’. The diagram is started by stating the central theme of the objective, say ‘Systematic Approach to Training’. Around this central theme subsidiary elements are added until the diagram looks something like Figure 1.
The diagram is far from complete and more subsidiary elements or 'balloons' can be added, each adding a small contribution to the content that might or might not be included in a session on 'Systematic Approach to Training'. There is no real end to this process and the spray diagram can continue to be expanded until we have included all conceivable items of information. We can then edit the content shown on the spray diagram, by:

- Saying all the items on the diagram 'possible' be included in your session.
- Reducing these 'could' be items to ones that 'important' be included.
- Reducing these 'should' items still further to ones that 'core' be included.

The 'must' items form the content of your session and study of them may lead you to revise the draft objective. We illustrate the process in Figure 2.
PLANNING THE SEQUENCE

Having a logical sequence is important, so we must be careful. What seems logical to the trainer may not seem so to the trainee.

Therefore, we need to consider what is logical from a trainee’s point of view - not from the point of view of an expert, a theorist, a practitioner or a researcher. Some guidelines to bear in mind when planning is that people learn by progressing from the:

- Known to the unknown
- Simple to the complex
- Concrete to the abstract
- Observation to the theory
- General to the particular

So why not change the sequence? Start by looking at the situation from the trainees’ point of view - find something to ‘switch them on’, to justify learning the theory. The sequence shown in Figure 3 takes account of the trainees’ entry behaviour and uses a logical build up, free from unnecessary detail.
Figure 3: Sequence

OUR ENERGY

↓

WHAT IS OUR SOURCE?

↓

HOW THEY HAVE BEEN PRODUCED

↓

HOW DOES PHOTOSYNTHESIS TAKE PLACE

PLANNING FOR MAXIMUM RECALL

The purpose of a session is to provide an opportunity for the trainees to acquire information. The objective defines what information they should acquire and later recall - the ‘core’ items in the content. The problem is to relate the information to the capacity of the trainees to remember it, and to devise ways of helping them to recall it.

Figure 4: Planning for Recall
The communication process in the session uses the trainee’s senses of sight and hearing. This input of information is then stored in the trainee’s short-term memory, which has a limited capacity and can retain information for perhaps 5-30 seconds. Some information will be passed to the long-term memory, although most of it will be forgotten as illustrated in Fig. 4.

To increase the amount remembered, make full use of the trainee’s sensory inputs by:
- Emphasising major points, repeating where possible.
- Using visual aids to provide the second medium of communication for the same points

Decide whether the recall of information can be achieved using:
- The trainee’s long-term memory. This means that the trainee can recall from memory the information you provided.
- Notes, handouts, and similar sources of information. The trainee can recall information by referring to handouts etc.

Notice how this might change the objective: in one instance we require that the trainee recall from memory, whereas in the other, they can refer to handouts.

The trainee’s capacity to recall major points of your session may depend upon when you present them. Figure 5 below illustrates in a general way when the maximum level of recall occurs.

**Figure 5: Period of Effectiveness**

![Figure 5: Period of Effectiveness](image)

Period of maximum effectiveness - 20/30 minutes

Time available
From Figure 5 we can see that the maximum level of recall occurs after some 20 minutes and can be maintained for about 30 minutes. This suggests that:

- The earlier period is less effective because the trainee’s mind has to adjust to possibly an unfamiliar environment. The more suitable this is, the easier it becomes to reach (A).
- The period will be shortened if the trainees are in familiar surroundings.
- The period length depends on how we introduce the session: The better this is, the shorter will be the time to reach full learning recall.

The middle period between (A) and (B) is when learning conditions are most favourable. This is when the major points should be presented. Also, we will lengthen the period if:

- active participation is encouraged.
- Visual aids and demonstrations are used.
- The trainees know that we will give them major points in some form of a handout.
- The learning environment is suitable - at a reasonable temperature, with circulation of fresh air and out of direct sunlight.

Mental and physical fatigue affects the later stages of the session after (B). This results in a decline of information retained. (B) provides the time in the session when we should summarise the major points. Other points to note are:

- The session should be kept as short as possible after (B).
- We can introduce another learning method (for example, a discussion or an exercise or a management game) after (B) to maintain active participation and internalise the learning.

If there are facts and explanations that they must remember, some form of a handout would help the trainees. We can regard this as ‘post-session’ learning. The session starts the process, and subsequent study aids long term memory storage and recall.

**STRUCTURING THE SESSION**

The key to an effective session style is to break down the session into its component parts and use a variety of approaches within each component. This is especially critical when a group of trainees will be attending a series of sessions by the same trainer. The three main parts are the **introduction, body and summary**.

The purpose of the **introduction** is to capture the interest and attention of the trainees. It can also serve to make trainees aware of the trainer’s expectations and encourage a positive learning climate. A good introduction is critical to the success of a session.
Tips for Creating an Effective Introduction.

- Review of the session objective.
- Ask rhetorical questions
- Ask for a show of hands in response to a general question.
- Ask a series of questions related to the session topic.
- Use an interesting or famous quotation.
- Relate the topic to previously covered content.
- Use a case study or problem-solving activity.
- Use a videotape or other media.
- Use a training film.
- Show an appropriate cartoon with the overhead or slide projector.
- Make a provocative statement to encourage discussion.
- Give a demonstration.
- Use a game or role play.
- Relate the topic to future work experiences.
- Share a personal experience.
- Relate the topic to a real-life experience.

The trainer can then make a smooth transition into the body of the discussion once the attention of the trainees has been captured with an interesting introduction. It contains the core of the information to be transferred to the trainees.

The purpose of the summary is to draw together the critical information presented and ensure that trainees leave the session with a clear understanding of this information. The summary should be brief and address only main points. There are several techniques which can be used to summarise it:

- Ask the trainees for questions. This gives trainees an opportunity to clarify their understanding of the content.
- Ask the questions for the trainees. Several questions which focus on the main points of the content may be used to summarize the content of the session.
- Use a transparency, slide or flipchart to review the summary points.
Delivering Interactive Session

An effective session can be one of the most exciting and rewarding aspects of a trainer’s responsibilities. The trainer who is able to sustain participant’s interest with an exciting, dynamic delivery using a variety of instructional methods is more likely to be successful in helping trainees reach the learning objectives. The time and effort invested in planning pay off as the trainer and trainees interact, discuss, question and work together.

Questioning Techniques

One of the most effective techniques a trainer can use during a session to help ensure interaction is to ask and encourage questions. Questions can be used to introduce sessions, stimulate interaction throughout the session and summarize content. Involving trainees through questioning helps to maintain their attention, which is critical when topics are complex and sessions are long. Suggestions for using questions include:

- **Ask questions for the entire group.** Those who wish to volunteer may do so, although the trainer must guard against some trainees dominating the discussion.
- **Target a question to a specific trainee.** When the audience is relatively small, this technique can be used to involve more of the trainees.
- **Use trainee’s names when asking and answering questions.** This recognition is a powerful motivator.
- **Provide positive reinforcement when trainees respond.** This praise will help to create a very positive climate and will encourage more trainees to enter into the discussion.
- **Repeat trainee’s questions and answers to ensure that all trainees hear the discussion.**
- **When a trainee asks a question, the trainer can answer the question directly, respond by asking the trainees different, related questions or offer the question to the other trainees.**

The key in asking and answering questions is to avoid a pattern. If the trainer always asks and answers questions using the same pattern, this critically important training skill will have limited impact.

Presentation Techniques

The skilled trainer uses a variety of approaches to involve trainees, maintain interest and avoid a repetitive lecturing style. A number of techniques can be used to make a session more interactive and effective:

- **Use the session notes prepared during the planning stage.** The notes include reminders and key points in the session introduction, body and summary.
- **Open the session with a good introduction designed to capture the interest and attention of the trainees.**
Communicate on a personal level. The trainer should attempt to relate to the trainees during the session.

Maintain eye contact with the trainees. Eye contact gives the trainer feedback on how well trainees understand the content and helps to communicate a caring attitude on the part of the trainer.

Exhibit enthusiasm about the topic. Smiling, moving around the room and gesturing with hands and arms project a feeling of energy and excitement.

Project the voice so that those in the back of the room can hear clearly. For large training halls, use a microphone if necessary, with a long cord that will permit movement around the room.

Avoid the use of slang or repetitive words, phrases or gestures that may become distracting with extended use. Avoid the use of fillers (e.g. “um”, “er”, “you know”).

Use a variety of audiovisual media.

Ask a number of questions and encourage trainees to ask questions.

Provide positive feedback when trainees ask questions, answer questions or make comments.

Use trainee’s names as often as possible.

Display a positive use of humour (e.g. humorous transparencies or slides, topic-related stories.)

Make smooth transitions between parts of the session. These transitions should be highlighted in the sessions notes and might include:

- A brief overview of the next topic.
- A review of the agenda between topics.
- A change of media.
- An interim summary before a new topic.
- An activity (case study or problem-solving activity).

Close the session with a brief but powerful summary.

Tips to Reduce Presentation Anxiety

- Avoid eating a big meal before the session. Not only will a full stomach make you drowsy, but it makes it more difficult to move around the room with energy.
- Arrive early to make sure that everything is ready before the first trainee arrives.
- Make sure all of the media equipment is working.
- Locate and check the lighting and temperature controls.
Decide where the session notes will be placed (e.g., on a lectern, desk, table) when they are not being held.

Have a glass of water available during the session.

Go for a short walk just before the session.

Look over your session notes one last time.

Greet trainees as they enter the room. Welcome them to the session and talk to as many of them as possible.

Take a few deep breaths to relax before beginning the session.

**USE OF VISUAL AIDS**

Visual Aids are an essential feature of effective communication. Most sessions are improved by using visual aids that we develop as part of preparation for a session. Generally, they are worth using to help trainees learn the major points of the session; they should:

**Attract and Hold Attention**

When trainees are listening passively, their attention is easily distracted. An interesting visual aid can attract and hold attention.

**Explain Words**

If they do not understand a critical word in a sentence, or if it is misunderstood, not only does the sentence become useless, we weaken the trainee’s belief in the prospect of success.

**Illustrate Relationships/Concepts**

The saying ‘A picture tells a thousand words’ holds true.

**Consolidate Learning**

The key points of a session can be presented on an overhead projector or recorded on a flipchart or chalkboard.

Research has shown that we take in more information from the sense of sight than we do from listening, in the ratio of something like:

75% **Sight**

25% **Hearing and other senses**

Bearing this in mind, it is not surprising that other studies have shown that sessions using visual aids are far more effective for understanding and recall than sessions that do not use visual aids.
Some further observations about visual aids:

- They should be simple
- Where possible use pictures and diagrams rather than many words.
- Use colour to give contrast to different major points.
- Where possible prepare visual aids before the session (e.g. overhead projector transparencies and flipcharts) Do not waste valuable learning time during the session.
- Use ‘formal’ visuals (e.g. an overhead projector) for pre-prepared material, and use chalkboards and flipcharts for ‘informal’ visuals developed during the session.
- Ensure all major points of the session are presented visually and orally.

PREPARING NOTES

There is no standard format for the notes needed to have a session. Some trainers rely on detailed notes and many rarely look at them. Some use papers or cards with lists of topic headings as prompts; others rely on their visual aids and use them as prompts; others do not use notes, and however well they conduct the session one might ask whether their session would have been better if they had used them. Some general observations about session notes:

- They are there to help you and are therefore personal to you.
- They should be kept as simple as possible.
- They should be easy to read - you might be some distance away from your notes.
- Use colour to ensure we do not miss major points.
- Use sketches to indicate where a visual aid is to be used
- Include a time schedule.

Although your session notes are personal to you, there may be occasions when colleagues have to conduct similar sessions and would probably appreciate reference to your notes.

SUMMARY

This is suggested that you use the following procedure to prepare the interactive session:

- Describe in general terms what you believe the trainees need to know.
- Develop a ‘spray diagram’ to show the possible extent of the content of the session.
- Carefully edit the spray diagram to eliminate all points that are not essential to the content of the session.
- List the major points of the session - the points the trainees must be able to recall.
- Alongside this list, note how you intend to assess whether they have learned the point.
- Review the content, taking a critical look at your list of major points, particularly ones that we cannot assess. Ask yourself whether we must include them.
- Write the objective for the session.
- Briefly describe the entry behaviour of your trainees. This might be based on precise knowledge, or on certain assumptions that you must make.
- Does the entry behaviour affect the objective? Review the objective, if necessary.
- Decide the most appropriate structure for the session. Do this by relating the objective, the content, the entry behaviour, and how you propose to assess attainment.
- Structure the content of the session, taking into account the:
  - Objective
  - Analysis of the spray diagram
  - Likely entry behaviour
  - Session structure you consider the most suitable
  - Time available
- Plan your visual aids in relation to the structure of the session. Decide the ‘formal’ aids you will prepare beforehand, and the ‘informal’ ones that will be evolved during the session.
- Review the structure of the content to ensure that all main points are suitably presented in visual form.
- Prepare your session notes and visual aids.
- Run through the session mentally to check sequence and logic. Adjust where necessary.
- Check class room and the equipment you intend to use.

**FEEDBACK**

Trainers plan and implement sessions for the benefit of their trainees. However, the trainers themselves are also presented with a learning opportunity. At the end of a session you can ask yourself many questions, ponder over earlier decisions you made, and generally reflect on the changes you would make if asked to do the same session again.

The following questions suggest areas for you to consider:
- Was the objective appropriate?
- Was the objective achieved?
- Did you assess the entry behaviour of the trainees correctly?
- How did the content relate to the objective and trainees’ learning capabilities?
- Was the sequence appropriate?
- Did you choose the right structure?
- Did you ask questions?
- Were the questions of high or low order?
- Did you allow sufficient time to answer questions?
- Did you fit the major points of the session into the best learning period?
- Did you communicate the major points of the session visually and orally?
- Were your visual aids appropriate to emphasising the major points of the session?
- Did the trainees appear to learn from your visual aids?
- Was your introduction appropriate?
- Did you summarise the main points of the session?
- How was your timing in relation to your planning?
- Did you feel comfortable with the timing and content of the session?
- Did the method of assessing performance suit the trainees?
- Was the assessment of performance valid in relation to the purpose of the session?

A checklist is provided for as ready reference.

**Planning**

- Identify topic
- Prepare a spray diagram.
- Edit spray diagram to identify ‘core’ items
- Express must items as an objective
- Consider entry behaviour of trainees
- Consider size of group
- Decide structure to be used
- Consider visual aid hardware available
- Prepare formal visual presentation of major points
- Consider informal visual aids
- Decide when to invite questions
- Decide timing
- Decide how learning performance is to be assessed
- Write session notes
- Check timing
- Check accommodation
- Check equipment
Introduction
- Gain attention/rapport
- Explain purpose/reason for learning about topic
- State objective
- Link to entry behaviour
- State participation
- Outline content and structure
- State finish time

Development
- Modulate voice to suit size of group
- Avoid reading session notes
- Use language appropriate to trainees
- Keep check of estimated timing
- Give relevant examples to support major points
- Maintain eye contact
- Present visual aids only when needed
- Avoid reading visual presentation word for word
- Assess trainee’s reaction and adjust if necessary
- Assist learning by use of informal visual aids
- Check trainee’s understanding where appropriate
- Where possible invite trainee’s participation

Summary
- Restate purpose/reason for learning about topic
- Restate objective
- Review content and major points
- Invite final questions
- Can out performance assessment where appropriate
- Give feedback
- Close with thanks
HOW TO LEAD A DISCUSSION: CASE STUDY AS A TOOL.

Learning Outcomes:—

Knowledge acquired through this module will allow the participants to:—

- Explain the purpose of discussion
- State how to lead a discussion
- State how to prepare for leading a discussion

INTRODUCTION

As the trainer, responsible for helping others to learn, you may not always be the subject matter expert. Sometimes your learners may know as much as you, or have as much or more experience than you on certain topics. Often you will be helping highly experienced, mature, people who are more likely to respond to an organised exchange of ideas and opinions, rather than to ‘being told’ or taught. In such a situation you may choose a method that facilitates learning by experience sharing and cross fertilisation of ideas. The Glossary of Training Terms defines the discussion method as:

‘A training technique in which the learning derives principally from the participants themselves rather than from an instructor’

Discussion as a method should not be used to ‘teach’ knowledge new to the learners. It should be used more for sharing experience, encouraging and developing thinking, modifying attitudes and getting commitment. A discussion for training purposes allows individuals to express their concerns and ideas, and to build upon and develop the ideas of group members. We use the method to continue a learning process started by other training methods, such as case studies and group. The purpose of the discussion may be to:

Share views

* Collect and generate ideas
* Obtain reactions and agreement
* Develop team work
* Solve problems
* Develop decision-making skills
* Change attitudes
* Consider practical application of theory
* Develop evaluative and synthesising skills
* Stimulate motivation and commitment
To be effective, discussions must allow every member of the group to contribute. This means that there is a limit to the number of people who can participate in a discussion. Between eight and twelve participants is about the optimum number for effective learning. If there are more members, a discussion may be unwieldy, and if there is less it may not stimulate sufficient ideas for a useful discussion.

Figure 1: The Structure of A Discussion

To ensure a dynamic, stimulating and effective discussion you need to consider how we can structure a discussion. Figure 1 illustrates a model that has proved helpful in planning and running discussions.

The discussion begins with a brief introduction from the leader. This should settle the group, establish the topic for discussion, and stimulate interest and willingness to participate in the discussion. We should plan the introduction before the discussion.

After the introduction, the group need a thought-provoking and demanding question that will make them think and want to contribute. We call such a question a Key Question. The first Key Question is
critical to the success of the discussion. It needs to be considered beforehand and carefully prepared to:

* Introduce the subject.
* Explain the purpose and reason for the discussion
* Link the discussion to prior learning experiences
* State the objective, if appropriate.

After the leader has posed the Key Question, discussion takes place within the group. You will be involved in that discussion actively listening and occasionally making contributions, depending upon the needs of the group. When we have extracted the learning benefits from the first key question, the group moves on with another key question.

Additional Key Questions can be prepared in advance, at least in outline. The diagram shows that the sequence may vary depending upon the reaction of the group, and the direction in which they are going. The problem you may face is that this direction could be different from what you had planned. Prepare an outline sequence, but be flexible so that you meet the group’s progress in the discussion. Remember that you are not in control of the content to the same extent as in a lecture or presentation. Because of this, the planned sequence may not make sense in the actual discussion. So, you may need to adapt to a different sequence as the discussion develops.

At the end of the discussion the discussion leader should summarise what has come out of the contributions and the conclusions reached, if any. Summarising it between Key Questions to consolidate may also be helpful and clarify what has been said before you lead into the next Key Question. This is a matter of judgement and will depend on the circumstances. Sometimes, for example, a group member will make a statement that summarises several earlier contributions: a summary from the leader is then unnecessary.

**PREPARING TO LEAD A DISCUSSION**

As with all learning events, preparation is important. The better the preparation the more confident you can feel as the discussion leader. Also, the more learning is likely to take place for your learners.

You should undertake the following in preparing for a discussion:

* Set an objective
* Analyse the topic
* Consider the group
* Identify and prepare Key Questions
* Prepare an introduction
* Decide if any other resources would be helpful, eg. a flipchart
* Organise physical arrangements

We should not take these activities in strict order because decisions about one of them may influence others.
Set an Objective

The objective should identify what they can do at the end of the discussion. This is often difficult to define with discussion leading where ideas, attitudes and motivation are usually involved.

Sometimes you can write the objective before you do anything else. Occasionally you may start with a topic you want discussed and only after analyzing the topic can you clarify the objective.

The discussion method is generally more appropriate for objectives that deal with feelings, opinions and attitudes. Of necessity these are less precise than objectives dealing with facts or skills. The outcome is less predictable and controllable than say, the outcome of a lecture. The details of the content come from the group and it is less easy to control than when using other methods. Success in achieving the objective is also less easy to measure.

Examples of objectives for discussion leading are:

1. “………… group members can describe the role of a leader in a management role”
2. “………… participants can analyse the difficulties in conducting audits”
3. “………… group members will identify the impact of word processors on their jobs”

Analyse the Topic

In preparing to lead a discussion you may start with an objective or just a topic heading. You yourself must know quite a lot about that topic – which may also apply to other participants in the discussion. Your job is to help the group to explore the topic and achieve the objective.

To help you lead the discussion, and to get the group’s attention on useful areas of the topic, you need to analyse the topic. This process will enable you to identify the key areas for discussion.

One starting point is to think through the topic and its various aspects and implications. During this process there is a danger of forgetting useful thoughts and ideas that would stimulate discussion. It is worth recording your thoughts to help you review and organize them.

Starting with a blank sheet of paper, head it up with the topic title. Then jot down key points, words or questions you think should be discussed about the topic. When you have completed your lists of points, you may go back over what you have done, looking for patterns or groupings. This can help you identify areas that the discussion needs to cover. Key points may be questions to which there is no easy answer, or perhaps there is no answer. However, getting to an answer is not the point. The point is to generate learning through a discussion of the issues involved.
The benefit of analysing the topic is that it can help you to decide:

a) What knowledge input may be necessary in the introduction?
b) What information the group may need
c) What areas of the topic are irrelevant to the objective?
d) Exactly what the objective is
e) Key questions to be put to the group
f) In what order you should discuss the various aspects of the topic

You are responsible for helping the group members to achieve the objective. This will require you to decide which contributions are relevant and are helping the group, which is side-tracking the group. The clearer you are before the discussion on where you want the discussion to go, the easier those decisions will be during the discussion.

Analysis of the topic may help you identify what may be a natural sequence of development for the discussion. This can give you a framework for planning and introducing the discussion. The discussion may develop in a very different way from your planned sequence. Because the group will talk about the topic as they see it, a new sequence may emerge. You must decide how important it is to follow one path rather than another. If you direct the discussion back to your planned sequence, you may take out some spontaneity and interest from the group members. This may make the discussion a harder work for you and less effective for the group members.

**Consider the Group**

A group discussion depends for success upon the participation and contributions of members. Each member of the group needs to recognise that he or she has something useful to contribute. They must also realise that they can learn from each other. It is the job of the discussion leader to identify the contributions that individuals can make and encourage them to make them.

In planning the discussion you need to consider:

* Size of the group. Less than 5 is too small to generate sufficient ideas and points of view. More than 12 is too large to keep them discussing as a single group in which everyone participates. You need to split into subgroups
* What knowledge is shared by everyone in the group?
* Breadth of experience in relation to the topic
* Likely reactions to the topic
* Your relationship with the group
* Their position compared with yours
Finding out about the learners and planning the discussion around them should help you avoid unpleasant surprises during the discussion. It will also make it easier for the group members to achieve the objective.

**Identify and Prepare Key Points/Questions**

Having analysed the topic and considered the sequence you can probably identify most key points to be discussed. In a perfect discussion the leader would introduce each Key Point with a Key Question. The Key Question would then stimulate sufficient relevant discussion within the group to cover completely the Key Point. The discussion leader would not need to intervene to bring the discussion back because the question would succeed in focusing attention entirely upon the Key Point. Once the Key Point is covered, you can summarise and move on to another Key Point. This should be introduced with another Key Question.

This model of a perfect discussion infers that the Key Question has been effective in stimulating interest, focusing attention and encouraging everyone to contribute. Key Question need to be carefully thought out and planned. They must make the group think and use their experience. The wording of a question should not be threatening to individuals in the discussion group. There should not be any easy answer to a Key Question and answering it should raise other issues that will stimulate further discussion.

When you are planning Key Questions you need to consider:

* Objective of the discussion
* Group Members
* Time
* Topic analysis

The Key Question to follow your introduction can be planned word for word. Later questions should be prepared in an outline so that they can be phrased to fit into the context of the preceding discussion.

The number of Key Question required for a discussion will depend upon the complexity of the subject, the depth of discussion required, the experience of the group and the time available. Just one ‘good’ key question might keep a group going for twenty minutes. After the first Key Question the group themselves may develop other questions that cover the points identified by the leader. This is good in that it reduces the need for intervention by the leader and increases the confidence and ownership of the group in what is happening.

The sequence of Key Questions in a discussion should reflect the topic and the way the group have developed the discussion. This makes planning a sequence difficult in advance because imposing the leader’s sequence may reduce the flow and sense of the discussion. When we have exhausted a key question, the next key question should be selected to link on to the previous discussion and phrased to reflect the way the group have been discussing the topic.
Time

This is a major constraint. Generally, highly effective discussions require a considerable amount of time. Failure to provide sufficient time or arbitrary closure of a discussion creates a major barrier to effective discussion. Unfortunately, discussion timing is extremely difficult to predict and depends upon:

* The interest and experience of group members.
* The quality of key questions posed by the leader.
* The way in which group behaviour helps or hinders development of discussions.
* The complexity of the objective to be achieved.
* The diversity of opinion within the group.

Prepare an Introduction

An important role for a discussion leader is to get the discussion going by means of an introduction. We require a delicate balance between a comprehensive introduction that switches the group off and a short one that leaves them puzzled.

When preparing an introduction you should aim for brevity and consider covering the following:

* State the topic to be discussed
* State the purpose of discussion
* Outline limits to topic and timing
* Set the scene
* Establish links with the experience of the group
* Bring everyone to a common starting point
* Arouse interest
* Prepare the group to contribute
* Lead up to first Key Question.

While the list is long, many items can be included very briefly and often grouped together. The introduction should reassure group members that they have something to say, encourage them to say it and listen to what others have to say.

Decide Upon Visual Aids

You must decide whether visual aids are suitable and helpful for your learners in the discussions you lead.

Visual aids can promote learning and stimulate interest. Prepared visuals are not possible except for topic headings and the first key question. If you feel able to prepare visual aid material it suggests you are intending to give some form of presentation.
Where ideas are being sought, having a flipchart is very helpful. The flipchart seems the most appropriate visual aid for discussions. It can be used to present key points for discussion and to record what is coming from the group. The flipchart can be used by group members other than the discussion leader. Use of the overhead projector (OHP) is less appropriate because it takes attention away from group members to the screen. While a flipchart can be left displaying a key point for discussion and not be intrusive, the OHP left on can be distracting to the discussion between group members.

Organised Physical Arrangements

Ideal accommodation is seldom available, but the discussion leader should make the best of what is available.

The room should be well lit and ventilated. Chairs should be comfortable to sit on for an hour or so, but not so comfortable that people fall asleep. If possible, we should provide tables – without them the atmosphere is apt to become too relaxed and to reduce active thought and participation.

The layout is extremely important because it can affect the discussion. The seating arrangements need to allow participants to see each other clearly and comfortably. Discussion is very difficult to maintain without eye contact between participants. The discussion leader needs to be seated as part of the group so as not to dominate the discussion and prevent interactions between other group members. The most participative arrangement is the circular table or square table, as shown in Figure 2.

The “U” formation shown in Fig 3 places the leader in a more obvious position of power but retains easy contact among all members of the group. It is also a convenient layout for other training methods, so can be used without major furniture shifting.
Figure 3: Physical Layout for Discussion

In both layouts any visual aid can be put alongside the discussion leader. The circular arrangement can make it difficult for group members next to the leader to see the visual aid comfortably as they have to twist round to face it.

**LEADING A GROUP DISCUSSION**

Once the group has assembled and settled down you can present your prepared introduction. This should be brief but adequate to arouse interest and give guidelines to the discussion. Then the first, prepared, Key Question should be posed to the whole group rather than to a nominated person.

You should be prepared to sit quietly to give the group time for thought. By looking around the group you can identify those with something to say, those who are confused or uncertain and those who do not wish to contribute. You must use your judgement on whether your question has been successful in stimulating thought and desire to contribute, or if it needs some qualification or rephrasing. Often your silence will encourage someone to start the discussion by attempting to answer the question. If no-one is prepared to speak spontaneously, you may nominate someone who appears to have something to say or you know has something to contribute on the question.

During its early stages a discussion may go ‘through the chair’ where ever: contribution is addressed to the leader. The leader responds and then someone else is brought into the discussion. This tends to reflect dominance by the discussion leader. It only takes a few questions nominating individuals to reply for the whole group to sit back and wait for ‘their turn’. On occasions such discussions can suddenly take off, without warning group members that are talking directly to one another and exploring their views. Debate and disagreement between members is to be welcomed because, if well directed and controlled, it helps learning.
To avoid discussions ‘through the chair’ you should address Key Questions to the whole group. Contributions addressed to you should be passed on immediately to another group member for elaboration or comment. Your physical presence should not dominate the group either through position or posture.

**INCREASE EFFECTIVENESS OF A DISCUSSION**

An important distinction between giving a lecture and leading a discussion is that careful preparation beforehand can work the content and framework of the lecture out in detail. The discussion, of course, also requires careful preparation beforehand. However, the framework cannot be imposed and the detailed content depends on interaction between group members, and with you, during the discussion. In an extreme case, it is possible to visualize a situation where a trainer prepares a lecture, which an actor then delivers; this simply could not happen with a discussion.

The skill of the discussion leader lies in stimulating a good exchange of opinions while keeping to themes.

During the discussion you should manage a fragile relationship between members of the group, and between them and you. The intention should be to generate effective learning, not conflict, dissent or alienation; Aim is to generate light rather than heat. We can identify two factors that, well managed, will significantly increase the effectiveness of a discussion; we will illustrate them in Figure 4.

**Figure 4: Effectiveness of Discussion.**

**QUALITY OF QUESTIONS**

A key factor in successful discussion leading is the use of questions. They provide two essential services:

1. They promote learning. Questions that are perceptive, challenging and appropriate create an environment where members of the discussion group can gain a deeper insight and understanding of the topic under discussion. We will call these questions learning questions.

Final Proof
2. They help in the general management and control of the discussion. By appropriate use of questions the discussion leader can control the discussion and provide opportunities for all members of the group to participate. We will call these questions Tactical questions.

To enable a group to obtain maximum value from a discussion, you must consider how to manage the event. You must promote learning by the sensitive use of learning questions and, also, control the discussion by using a variety of tactical questions.

An analogy can be drawn with building a wall - a wall of understanding. The bricks in the wall are the learning questions used to promote a better understanding of the topic. The mortar between the bricks is the tactical questioning, maintaining control of the discussion and generally directing its development towards achieving the objective.

**LEARNING QUESTIONS**

The technique of using questions to promote learning dates back to the days of Socrates in the fifth century B.C. The leader of a discussion uses the “Socratic Approach”, as it is now called, to challenge assumptions, compare opinions, and generally encourage the development or a deeper understanding of the topic under discussion. Learning questions can be considered to fall into two broad categories, low order questions and high order questions.

**Low Order Questions**

Essentially, these test existing knowledge. They make only a limited contribution to a discussion because they usually require a factual answer. Low order questions are of value in discussion to check understanding and to establish a common base of information. There are three main types of low order questions:

- **Recall Questions** that ask group members to contribute facts.
  
  e.g. “How many……... ?”

- **Comprehension Questions** that ask group members to describe or check understanding of something, to establish a common starting point for the discussion.
  
  e.g. “What do we understand by the term.....?”

- **Application Questions** that ask group members to relate an issue or a simple problem to their own situation and consider how they might apply a proposed solution.
  
  e.g. “How would that work in your department....?”

**High Order Questions**

These provoke discussion because there is no clear-cut answer. Group members may interpret the question differently and apply their own experience, opinion and attitudes in their response. This leads to a wide diversity of views that can be used as the basis for discussion. Almost certainly, there will be no ‘right’ or ‘wrong answer’. It is exchange of a variety of comments that can lead to a much wider understanding of the topic or problem being discussed. The following are types of high order question:
**Analysis Question** asks group members to make deductions. They are encouraged to organize their thoughts and to look for evidence to interpret and to make generalizations. The value of these questions is that the leader can draw on the experience of members. The question can be illustrated by reference to similar situations that encourage members to express opinions.

  e.g. “So what does that mean for other section?”

**Synthesis Questions** stimulate the group’s creative potential. They require people to reflect and work together as a team, encouraging participants to develop ideas and suggestions.

  e.g. “Can we build on that idea somehow?”

**Evaluation Questions** can be considered the highest level of thinking to be obtained from a discussion group. No matter how brilliantly a conclusion from other categories of questions, they must evaluate it and consider its worth. It encourages members to give reasons for their judgements and to assess different ideas and solutions.

  e.g. “Which of these possible approaches do you prefer, and why?”

**Application of Learning Questions**

In planning the types of question to ask, you should consider:

1. The level of the questions. If too low, the group may see the discussion as a pointless recall of knowledge. If too high a level, the group may feel threatened and respond in a defensive manner. High order questions can make the group feel that they are being asked to contribute outside their level of expertise and experience.

2. What alternative questions to ask, either further up or lower down the order. This should provide a degree of flexibility and permit you to adapt to the learning needs of the group.

3. The time available. Low order questions require a relatively simple answer: they are less likely to provoke controversy and can be concluded quickly. High order questions are likely to do the opposite.

**TACTICAL QUESTIONS**

We need tactical questions when group behaviour is limiting the learning from the discussion. They may be necessary to bring some participants into the discussion, to acknowledge the contribution of others and to get the discussion to move on. Tactical questions are devices for directing the discussion and generally controlling the event. In themselves tactical questions do not promote much learning; their main purpose is to focus discussion on the high-order learning questions.

They help the discussion leader to:

* Ensure that learning questions are fully understood, before the detailed discussion.
* Manage the participation of group members.
* Control the allocation of time to each aspect of the topic.
* Summarise and check for understanding and agreement.
Tactical questions can be considered within three broad categories:

1. Open Questions
2. Probing Questions
3. Closed Questions

1. Open Questions

   To establish rapport
   Introductory questions used to establish an initial relationship with the group. Examples:
   - ‘Didn’t you use to work in the audit department?’
   - ‘Have you met ’

   To explore the background
   Used to establish a common basis upon which to build the discussion. Examples:
   - ‘Please tell us about?’
   - ‘How does the (topic) affect your department?’

   To explore opinions or attitudes
   Again, used to establish a common basis, but the emphasis is now on the individual member’s opinion or attitude towards the topic. Examples:
   - ‘To what extent do you feel...?’
   - ‘Just how far do you think?’

2. Probing Questions

   To show interest or encouragement
   Where the leader encourages a member of the group by making supportive statements, or repeating key words to encourage responses from others. Examples:
   - ‘That’s interesting......?’
   - ‘I see ......?’ (Tell us more)

   To seek further information
   Used to develop a member’s statement by promoting further comment. Examples:
   - Why?
   - What would you do if......?’
To explore in details

Where comments of potentially great significance are highlighted by seeking further opinions. Examples
- ‘Just how far do you think…..?’
- ‘You feel that ……..?’

To establish understanding

Where the leader controls the discussion by summarizing a particular aspect of the topic.

Example:
- ‘As I understand it…….?’
- ‘The consensus is .....?’

3. Closed Questions

These are especially useful for establishing facts, or to control a discussion in danger of falling apart through lack of understanding. Examples:
- ‘Are you ....?’
- ‘How often do you ....?’

GROUP BEHAVIOUR

During a discussion you have the responsibility to control the group’s participation. You have to:

* Understand the contribution of each member.
* Help group members to understand each contribution.
* Ensure that the contributions relate to the Key Question.
* Summarise the contributions and record main points.
* Summarise each aspect of the topic at an appropriate time
* Encourage contributions from everyone in the group.
* Limit contributions.
* Keep to time constraints.

By improving the quality of group participation and planning high quality questions you can increase the effectiveness of the discussion. During the discussion you may be faced with group members who are either not helping or actively hindering the group. You may be faced with group members who talk too much. If you ‘shut them up’ you may lose them for the rest of the session; if you let them go on for too long, you may lose the group who by that time get bored and have ‘switched off’.

Final Proof
Supplementary questions and summaries can be useful to clarify and break into an individual’s contribution. Asking another individual to comment upon what has been said can also help to widen the discussion.

(b) Do not put too much pressure on ‘silent members’. It may do more harm than good. Silence does not mean that they are not learning.

However, encouraging looks, or asking silent members to help with recording contributions can be useful to bring them into the body of the group.

You can use three major techniques to control the discussion:

**Questions**

The quality of the discussion is very dependant on the quality of questions. This applies to both key questions and supplementary questions. Good questions can help people to think, clarify understanding, and stimulate an active approach to the topic.

It is essential that you ask questions with a genuine desire to understand or clarify. We should frame questions in a way that avoids any member feeling attacked. Any attempt to make a member of the group look foolish, or to score off a member, will often lead to a breakdown of effective discussion.

Asking how one contribution relates to an earlier one will help to keep the discussion together and develop understanding of the topic.

**Silence**

Silence can be a most valuable contribution to a discussion. During silences, people can think. To use silence you should make sure that the group have a good, challenging question to help them to think. Then remain seated and be silent yourself.

Associated with silence is the art of listening. It can be helpful if you note down useful comments from members of the group and encourage them to do also. The skill of listening is one of the most demanding in discussion leading. As a discussion leader you should listen carefully to the contributions being made; decide whether you have understood; decide whether the rest of the group understood, and perhaps phrase a clarifying question and at some stage summarise the content. Doing all these things together is very difficult and very tiring. Your attention will almost slip from time to time, so note taking can be helpful in keeping concentration and providing a reminder to which you can refer for summarising.

**Summaries:**

At certain points in the discussion you should gather related contributions together and summarise them. If this is a summary of Key Question, recording this in writing or the flipchart is useful. This gives you the opportunity to control the movement of the discussion and prevents the group from wandering from the topic; it consolidates what they have learned; and gives the group a sense of achievement.

The summary is useful to control the timing of the discussion. Providing a summary can round off a Key Question. It will normally close discussion on that aspect, and allow discussion to move on to the next.
By controlling the discussion in this way, you can apportion the time available.

Sometimes spending time on a deeper discussion of one aspect may be more useful for the group than move on to another. This is a matter of judgement, and will depend on the objectives, the learning value of the discussion, and other constraints. However, members of a discussion group will become extremely frustrated if the leader prematurely concludes their discussion.

The final summary of a discussion can be quiet brief and should round off the discussion into a coherent whole. Because the final summary must reflect the content of the discussion, we cannot plan it in advance. The use of the flipchart to record points arising and reference to notes made by the discussion leader can both be very helpful in doing the final summary.

During the final summary you should consider the following points:

* Review the points covered
* Acknowledge specific contributions
* Develop conclusions reached
* Action to be followed - when and by whom
* Reinforce understanding of the topic

**THE ROLE OF THE LEADER**

The primary purpose of the discussion is to enable participants to learn from each other. The discussion leader should be:

* Impartial in responding to group members.
* Supportive to the group and encouraging contributions.
* Managing the discussion within time constraints.
* Not seen as the centre of attention.
* A member of the group.
* Prepared to learn as much as any other member of the group.
* Stimulating the group to explore the topic in depth.

The essential feature of your role is to serve the learning needs of group members. You can do this by asking questions to clarify members' understanding and to challenge assumptions, and by summarising the contributions and conclusions reached in the group to help them achieve the learning objective.

This may appear to make the discussion leader's role more passive than the role of presenting new information in a lecture. The role is in fact, very demanding and active; attentive listening and a quick grasp of what is being said are essential. In a discussion, differences in entry behaviour become far more apparent as the people in the group become equal partners; you have to create a learning event that will lead to a full discussion of the subject and the realisation of the objective for the discussion.
LEADING A CASE IN A CLASS ROOM

MAJ. GEN S.K. SEN (RETD)

Teaching through a case study is called case leading and the instructor is called a case leader. The implication is obvious. Case studies and normal teaching or pedagogy are two entirely different genre of teaching. In a case study the instructor merely leads, i.e., intervenes only when necessary, to lead the discussion and keep it on the right path.

- A case leader keeps the proceedings orderly.
- He guides the discussion on the right path by asking suggestive questions.
- He controls speed, identifies and clears blocks in discussion and does time management.
- He handles unpredictable developments and volatile reactions.

HE MUST KNOW HOW TO KEEP OUT OF THE WAY AND LEAVE THE TALKING TO THE TRAINEES.

- He should also be a student and appear to be so to the trainees by
  - listening intently
  - respecting students views
  - asking relevant questions to show his interest.
- He should help in expressing a concept if he finds that the trainee is having difficulty in doing so.
- He should supply additional information if there is a gap or a bottleneck.
- He should keep himself and his pedagogical tools in the background and make the student feel free and encourage him to wade through his ignorance, perplexity, insecurity and loose thinking without the fear of the critical teacher.
- He must refrain from using seven pedagogical sins of condescension, sarcasm, personal cross-examination, discourtesy, self-approval, self-consciousness and talkativeness.
- He should ensure that the understanding that student reaches is his own and not that of the instructor.
- He must understand that when, the case is being discussed by different groups at different times, conclusions are likely to be different.
- He may use three tools of infinite flexibility which promote productive discussion without diluting the students' learning responsibility -

  -ask questions: but only when necessary, preferably as response to what has just been said. These should be used as inconspicuous aids to advance the discussion. But these should be very infrequent and to be used when absolutely necessary.
- **restate and rethread what is said:** This is a coordination function, restating what has been said by the student to bring it in line with the topic, confirm from the student whether what the instructor has said is what the student meant. This gives the student a chance to clarify his thoughts further.

- **voice his opinion and interjection:** The instructor can speak to firstly, regenerate the self-propulsive power of the class, secondly, clarify a difficulty surmountable only with technical knowledge and thirdly, to supply missing information. He speaks only when the class has need of it, is ready for it and can make use of the information in their discussion.

**SUMMING UP:** This is a very important function. The instructor needs to sum up at two stages. First, he should provide the class with a summary from time to time of what has gone on so far summarising the views of the student. Secondly, at the end of the discussion, he should give a gist of the entire finding of the class. He may of course get this done by one of the students also. For this periodic and end of the class summing up he may either make use of the charts prepared by the subgroups or the chalkboard.

**DIFFERENCE BETWEEN CASE METHOD (CM) AND TRADITIONAL TEACHING (TT)**

1. Teacher is the sole performer, always in control. Students are passive, compliant and obligated to be attentive. In CM, students are in control whereas the teacher is just an observer and guide.

2. Teaching a case is an exercise in leadership. The teacher engages student participation in the collective exploration of a problem and the effort to reach a joint resolution. In TT, the teacher analyses the course material and conveys his interpretation to the class.

3. In TT, the teacher stands between the material and students. In CM, the students meet the material more directly, interacting with each other as well.

4. Teaching a case consists of managing those encounters toward purposeful ends and (as the two lines, \(< — >\), suggest) of learning from them as well, about both the students and the case itself. While intellectual and procedural authority belongs to the teacher in TT, teacher and students share it in CM. Both determine what is learnt.

5. In TT, knowledge flows unidirectionally, from teacher to students. In CM, both teacher and student assume responsibility of students’ learning. Knowledge flows from student to student, student to teacher and teacher to student.

6. Learning being authoritarian in TT, the teacher often probes into or patronises the students’ ignorance, exposes their fallacies and deficiencies and always appears to students as a critic. He sits in judgment over the acquisition of communicable wisdom. In CM, learning is participative. Here, since the acquisition of wisdom is mutually dependant, teacher is not viewed as a critic but a co-traveller.
7. In TT, teacher's goal is student mastery of teacher's truth, demonstrated through examinations and knowing the right answers to questions. In CM, teacher's goal is student mastery of student's truth demonstrated through intra-group discussion under the guidance of the teacher.

8. In TT, teacher is not worried about student contribution. In CM, teacher is genuinely interested in student contribution of ideas, analyses and conclusion. So he tries to awaken student interest and stimulate active engagement among students.

9. In CM, there is "more work but more fun". But in TT, it is "less work but less fun". In CM, there is a premium on skill in discussion, ability to analyse, dealing with the unexpected and experiments with ideas and solutions. The classroom experience is not "cut and dried". It is fluid and exciting.

10. In CM, no two case discussions are alike because participants are not the same. In TT, the passage of knowledge is uniform and repetitive. In CM, learning is the responsibility of the students. In TT, learning is the responsibility of the teacher.

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EXPERIENTIAL LEARNING & HOW TO RUN GROUP EXERCISES

As individual human beings we experience our lives at three levels of existence. In simple terms they can be described by the phrase ‘we think, we feel, we do.’

The relationship between the levels

All the three levels are inter-related and interactive. This means that what we think is influenced by and in turn influences what we feel and do, the same is true of each level in relation to the other two. For example what we do is influenced by and in turn influences what we think and what we feel. In the language of psychology these three levels are termed the cognitive domain, the affective domain and the action domain.

It is also true that we experience our existence at all three levels simultaneously and therefore cannot really disassociate one level from another. For instance, as you read these words you are doing, i.e. you are experiencing the action domain. This is because perception is an active process, physiologically and psychologically, which needs to be engaged in order to read. Reading is also a thinking process and therefore you are engaged in the cognitive domain. Finally, what you are reading and your thoughts concerning it have relationships with your existing beliefs about and attitudes towards the subject. Therefore your feelings are involved and you are also in the affective domain.

You are unlikely to be conscious of your experience of the affective domain in reading these words unless they explicitly contradict or actively re-affirm your current beliefs and related attitudes. Similarly, you will not be conscious of the action domain in consciously attempting to focus your eyes. At a conscious level you are only aware of the cognitive domain i.e. your thinking process. This does not mean that your experience of reading these words is confined to that level. Human existence is experienced at all three levels.

The three levels and learning

If that last statement is accepted, it follows that learning is experienced at all three levels. Since cognition, affection and action occur simultaneously learning both influences and is influenced by all three domains. What you learn from this manual will be the result of the interaction between the three domains as you read it. Any theory of learning therefore has to be able to explain the process in terms of the three levels of existence, and it has to be applicable in promoting learning through utilizing the cognitive, affective and action domains. These two points underpin important theories of learning.

It will be clear from the figure 1 that System Beta engages an individual learner in all three levels of existence. The process described involves the cognitive, affective and action domains.
Two critical features

A critical feature of the process is the starting point of the hypothesis. The idea or concept in this stage is formulated by and belongs to the individuals. This means two possibilities in practice. The first is that it may be an original and unique idea that is formulated by the individual. The second is that the idea or concept is presented to the individual by someone else through, for example, a lecture, a book or a conversation. According to the model, however, the individual in both cases will need to complete all stages of the cycle in order for the learning to occur. In the latter case doing so will also probably have the effect of producing an individual interpretation of the concept, therefore each individual’s learning remains unique. It also follows that in the case of a presented concept through, for example, a lecture, learning does not happen unless and until all stages of the process are completed. This point is obviously significant in the design of learning opportunities within training and development.

A second significant feature of the model is that because the process is cyclical the starting point does not have to be formulation of the hypothesis. Individuals can and do enter the cycle at different points in relation to separate pieces of learning. The stages in figure 1 are labelled with numbers in sequence for convenience rather than to represent reality. For instance, it is common for new ideas or concepts to suggest themselves in stages three, four and five.

The theory known as ‘experiential learning’ was developed by the American psychologist David Kolb and his co-workers in the mid-1970s (Kolb et al, 1984). Since then it has become one of the most well known and widely applied theories in training and development, especially in terms of managing organization change and in related adult learning. The theory is very similar to System Beta.
Rationale of experiential learning

The rationale of experiential learning is quite simple. It is that learning approximates the process of problem solving, and that therefore teaching or training which is designed to encourage, support and enable learning should be based on a problem solving approach. This basic idea is worth exploring in a little more detail.

Traditional teaching methods are based on ideas which have particular associations. These associations include:

- The presence of and key role for a teacher or trainer
- A particular and specific place for learning to occur such as a classroom or training centre
- A focus on knowledge, ideas and concepts
- The use of learning materials such as textbooks and handouts.

Such associations produce particular meanings that are attached to the learning process. These include the meaning that:

- An individual’s learning is the responsibility of some other person, e.g. the teacher
- That learning is a separate and discrete activity that occurs at particular time in a specific place
- That learning is essentially a passive process
- That learning is concerned with acquiring or understanding abstract information, ideas and concepts.

It can be argued with great justification that most individual’s experience of formal learning leads to these associations and produces these meanings.

An alternative is to view learning as similar to problem solving. In this case the associations are that:

- Problems are very specific
- They belong to the individual and are their responsibility to solve
- That they require experimentation as part of the process of reaching a solution.

These associations produce a different set of meanings:

- Problems solving is a active process
- It is concerned with practical application and results
- The focus is real and concrete
- Problem solving is a continuous and natural part of living.
What this means in practice is that most individuals actually learn passivity and dependence in relation to learning through their experience of traditional methods. It also means that traditional methods do not actually reflect the reality of learning since they do not adopt a problem solving approach. Using problem solving as a basis for explaining the learning process leads to the theory of experiential learning.

It has been found, however, that learning that results in increased self-awareness, changed behaviour, and the acquisition of new skills must actively engage the individual in the learning process. In particular, adults have been found to learn more effectively by doing or experiencing.

Adult learning specialist David Kolb has described this learning process as a four phase cycle in which the learner; (1) does something concrete or has a specific experience which provides a basis for (2) the learners’ observation and reflection on the experience and their own response to it. These observations are then (3) assimilated into a conceptual framework or related to other concepts in the learners past experience and knowledge from which implications for action can be derived; and (4) tested and applied in different situations.

The adult learner assimilated useful information into their personal ‘experience bank” against which future learning events will be compared and to which new concepts will be related. Unless what is learned can be applied to actual work or life situations the learning will not be effective or long lasting.

People responsible for designing, learning events should keep these phases in mind as they develop ways to help the learner understand and be able to use the new knowledge and/ or skill.
Conclusion

In India even today, particularly in the Government Organisation, training is not considered to be so important for improving performance. Primary reason for such a situation is that in many cases, training is not directly linked with the perceived need of the organisation owing to absence of TNA. Systematic Approach is not followed in organising the training. Most of the cases, training is supply driven. Another major weakness is the indiscriminate use of lecture method. On the other hand, on-job training is now being neglected. However, due to strong intervention of the Department of Personnel and Training, Government of India during the recent past the situation is improving. Direction has been changed. Training is becoming more and more trainee centred than the trainer-centred. Organisations are now sensitised and showing considerable interest on Systematic Approach to Training. Training institutes are trying hard to make training demand driven. If this process continues, there will be a virtual cycle and training will be used more systematically in improving performance. As a result, training will be considered as an important activity for the continuous improvement in the functioning of the organisation.
Group Exercise

INTRODUCTION

Training activities are influenced to a quite marked extent by the entry behaviour of participants (The things they already know and can do and the attitudes they adopt). This is especially true when the learning group consists of mature, experienced, adults.

Each participant will bring his or her own mixture of status, knowledge, skills, attitudes, opinions, prejudices, motivation, good and bad experiences, and so on, to the learning event. What is missing is an experience common to all members of the group, around which they can learn.

A group exercise can establish the common ground around which trainees can learn. Instead of basing their thinking on an abstract theory’, trainees can start from their experience in an exercise and build up to a principle or a theory.

WHAT IS A GROUP EXERCISE?

A group of officials on a course is given the task of counting the number of pebbles in a square metre of beach; or to build a tall tower using only A4 sheets of paper and a stapler; or to invent a new game using a pack of playing cards. These are all examples of possible group exercises used in training mature and experienced officials. The purpose in the mind of the trainer might be to develop good group working relationships.

Clearly the approach is a very different one from starting with a lecture about the views of a distinguished theorist. The major differences are that:

a) The trainees are given something active to do, and

b) That their learning is developed from their experience in performing that activity.

GROUP EXERCISES AND LEARNING

Group exercises provide an opportunity for each member of the group to be involved in doing something and to learn from what he or she does. Trainees have an opportunity to try different ways of doing things without the risk involved if they tried the same things in a real working environment. The impact of this experience and the realism of the simulated situation can change behaviour and should help the process of transferring and applying what they have learnt to their work situations. We can represent the process in this way:

EXPERIENCING

APPLYING

DISCUSSING

GENERALISING

105
Experiencing

This process starts with experiencing something in the group exercise. The trainee becomes involved in the group activity - for example doing, saying or observing something. This involvement becomes the basis of the whole process.

Discussing

The trainee discusses with other members of the group his or her reactions to and observations on the activity that they have also experienced or observed. We discuss what occurred in the exercise and group members assess its significance.

Generalising

The group members need to do more than just discuss their specific experience in the exercise. They need to go on to develop general principles derived from the experience to their own work situation.

Applying

Finally the group members should plan how they can apply the general principles to the situations they face at work.

SOME SUBJECT AREAS FOR GROUP EXERCISES

Group exercises are generally used for studying and developing interpersonal skills. The skills involved include the following:

- Leadership
- Communications
- Motivation
- Negotiation
- Problem-solving
- Decision-making
- Working in groups
- Team building
- Contributing to Meetings

SELECTING AND USING A GROUP EXERCISE

Some do’s and don’ts are suggested below to help in making group exercises as effective as possible.
As the trainer, you should:

* Make sure that you are thoroughly familiar with the subject matter. Flexibility is needed to adapt the discussion of the material to what actually happens in the exercise, while making sure that the main points it was intended to bring out are covered.

* Make sure that the exercise is appropriate to the objectives of the learning unit and to the abilities and attitudes of the trainees.

* Consider whether there is a need to adapt, restructure, rewrite or modify a generally suitable exercise, so that it fits the objectives or the needs of the particular group.

* Make sure that you are thoroughly familiar with the procedure for conducting the exercise.

* Consider the various possible outcomes and relate these to the subsequent discussion of what has been learnt.

* Plan the discussion. We must allow time for a thorough analysis of what happened in the exercise and its implications. Remember that this is more important than the exercise itself. The exercise is only the means of producing the material to be analysed and discussed. It will have limited value unless the issues arising from it are fully explored with the group.

As the trainer you should not:

* Use group exercises merely
  - to fill in time
  - to provide variety
  - to ‘see what happens’
  - because you like using them

* Use an exercise in the same way for all groups and irrespective of the objectives of the training.

* Structure the discussion in a pre-determined way, irrespective of what happened during the exercise.

**CONDUCTING THE GROUP EXERCISE**

You should consider the following points:

**Relate to Objectives**

You should remember throughout the exercise what the objectives are in using it, and stick to them.
Plan and Prepare Thoroughly

Make sure that all the administrative details of the exercise are arranged beforehand.

Consider also a variety of possible outcomes of the exercise. How can you relate these to the purpose of the exercise and of the learning unit as a whole? All the points you wish to discuss may not emerge from a particular run-through of the exercise: you may need to discuss other possible outcomes. What lines will the discussion follow afterwards, to cover the learning points?

Plan for Contingencies

The exercise may take more or less time than anticipated or have a different outcome.

Having alternative material or activities available and ready to be presented is prudent, e.g. for groups that are more/less advanced than the average.

Check where we can make changes to the timetable if that should be necessary.

Check Knowledge

As the use of group exercises becomes more common, it is possible that some trainees may already know or have done the exercise. Usually this does not matter, but with some exercises the impact can be ruined if someone in the group already knows how to solve the problem or analyse the situation.

Brief Participants

Explain the procedure and make sure that all participants understand their roles in the exercise before starting. This may involve:

- Stating the objectives clearly and concisely
- In some cases giving an overview of the subject matter first
- Describing the procedure for the exercise
- Explaining the trainer’s role during the exercise
- Explaining why this method of training is being used.

In briefing the group, keep the desired outcomes in mind. However, we should not overload the participants with instructions. Where possible, giving instruction in small amounts at appropriate stages of the exercise is better. Check that the briefing is understood.

Watch Observers

If the exercise involves some participants acting as observers rather than being directly involved in the task, make sure that they do not interfere with the process.
Keep Within Broad Guidelines

Exercises involve participants in performing a task in their own way; this is a major reason for using them. However, keeping the exercise within broad guidelines is necessary so that it achieves its objective; otherwise it may deteriorate into a “fun” activity from which the participants learn nothing.

Collect Information

You should observe the process and make notes, even if we have appointed observers, so that comments afterwards can be related to what happened in the exercise. You can then add to the observers’ comments if they have failed to observe some important points.

We should ask that the observers and participants comment on and discuss what happened before you make any comments. They will have comments to make and need to be given the opportunity. Also, you will need to concentrate on leading the discussion away from the specific outcomes of the exercise and on to general principles.

Discuss Issues

Participants should not be left to draw their own conclusions. The exercise should be the source of topics for discussion rather than the context of learning by itself.

Discussion of the issues should normally involve three stages:

1. **Describe the experience**

Get the group to discuss such questions as:

- What happened?
- What was said/ done?
- What did participants think/feel?
- What problems emerged?
- What courses of action were tried?
- To what extent were aims of the group achieved?

2. **Analyse the experience**

Get the group to discuss such questions as:

- Why did things happen?
- Why did problems arise?
- Why did the actions taken fail/succeed?
- What were the consequences of what was said or done?
3. **Develop general concepts**

Get the group to relate their experience in the exercise to the work they do. Get them to consider such questions as:

- Do people say/do things in this way at work?
- What are the consequences?
- Can success/failure in the exercise be related to success/failure in work situations?
- Can the group develop a plan of action or general principles for improved performance at work?

In short, the discussion should start with consideration of the details of what happened and should move on to consider the underlying principles that apply to work situations. Throughout the discussion, the participants should discuss what happened - the behaviour that they observed - not speculate on the underlying motives or personal attributes.

**REVIEW THE EXERCISE**

After the session has been completed, the trainer should review the exercise. Consider:

- Did it achieve the objective?
- Does it need to be modified, revised or improved?
- Was the exercise run in the most effective way?
- Were the outcomes discussed adequately?

**ADVANTAGES OF GROUP EXERCISES**

We can summarise the advantages of using group exercises in training as follows:

- They provide for trainee-centred learning
- They provide a common experience, shared by all members of the learning group
- Exercises can be designed/selected/modified to fit the objective of a learning unit and as a major contributor to a learning event
- All participants can be actively involved and their attention and motivation are therefore more easily maintained
- They minimise the effects of different entry behaviours
- The trainer acts as a coach/mentor. Freed from the role of a direct instructor, he or she can supervise, observe, question and provide feedback
- Exercises enable complex interpersonal skills to be practised
- They can be used to modify attitudes and to develop knowledge and skills.
DISADVANTAGES OF GROUP EXERCISES

The main disadvantages of group exercises are that:

- They require careful preparation and planning to be effective
- The outcome varies from one group to another and is difficult to predict
- What individuals learn depends on their own level of involvement, their ability to relate what happens in the exercise to their existing knowledge, skills and attitudes and their ability to relate very specific experience to general principles
- The success of group exercises is very dependent on the attitudes and expectations of trainees. They may expect the trainer to “teach” them (i.e. to be the sole source of information and advice). Therefore, they may regard an exercise as light relief or fun, rather than as a serious method for helping them to learn.
Issues on Human Development
INTRODUCTION TO HUMAN DEVELOPMENT

Time - One hour thirty minutes

Learning Outcomes:-

Knowledge acquired through this module will allow the participants to:-

- Explain the common characteristics of Developing nations
- State the concept of Human Development
- Discuss the issues relating to Economic Growth & Human Development
- Explain Human Development Strategies

We attempt to provide an overview of the great diversity of developing countries. Despite these variations, however, Third World nations share a common set of problems, both domestic and international - problems that in fact define their state of underdevelopment.

Common Characteristics of Developing Nations

Common economic features of developing countries permit us to view them in a broadly similar framework. We will attempt to identify these similarities and provide illustrative data. For convenience, we can classify these common characteristics into seven broad categories:

1. Low levels of living, characterized by low incomes, inequality, poor health, and inadequate education.
2. Low levels of productivity
3. High rates of population growth and dependency burdens
4. High and rising levels of unemployment and underemployment
5. Substantial dependence on agricultural production and primary-product exports.
7. Dominance, dependence and vulnerability in international relations.

Low Levels of Living

In developing nations, general levels of living tend to be very low for the vast majority of people. This is true not only in relation to their counterparts in rich nations but often also in relation to small elite groups within their own societies. These low levels of living are manifested quantitatively and qualitatively in the form of low incomes (poverty), inadequate housing, poor health, limited or no education, high infant mortality, low life and work expectancies, and in many cases a general sense of malaise and hopelessness. Let us look at some recent statistics comparing certain aspects of life in the underdeveloped countries and in the more economically advanced nations. Although these statistics are national aggregates, often incorporate substantial errors of measurement, and in some cases are not strictly comparable due to exchange rate variations, they do provide at least a summary indication of relative levels of living in different nations.
Per Capita National Income

The gross national product (GNP) per capita is often used as a summary index of the relative economic well-being of people in different nations. The GNP itself is the most commonly used measure of the overall level of economic activity. It is calculated as the total domestic and foreign value added claimed by a country’s residents without making deductions for depreciation of the domestic capital stock. The gross domestic product (GDP) measures the total value for final use of output produced by any economy, by both residents and non-residents. Thus GNP comprises GDP plus the difference between the income residents receive from abroad for factor services (labour and capital) less payments made to non-residents who contribute to the domestic economy.

As an illustration of the per capita income gap between rich and poor nations, look at Figure 1.

Per capita GNP comparison between developed and less developed countries like those shown in Figure 1 are however, sometimes exaggerated by the use of official foreign-exchange rates to convert the LDC national currency figures into U.S. dollars. This conversion does not measure the relative domestic purchasing power of different currencies. In an attempt to rectify this problem, researchers have tried to compare relative GNPs and GDPs by using purchasing power parties (PPPs) instead of exchange rates as conversion factors. PPPs use a common set of international prices for all goods and services produced.
More precisely, purchasing power parity is defined as the number of units of a foreign country’s currency required to purchase the identical quantity of goods and services in the local (LDC) market as $1 would buy in the United States. In India, your pay less than Rs. 10 to travel 5 km by bus but in UK you are to pay more than Rs. 100 for same service. Clearly if LDC domestic prices are lower, PPP measure of GNP per capita will be higher than estimates using foreign-exchange rates as the conversion factor.

Table 1: A comparison of Per Capita GNP in selected Developing Countries Using Official Exchange-Rate and Purchasing Power Parity Conversions, 2004

<table>
<thead>
<tr>
<th>Country</th>
<th>USD GDP Per Capita</th>
<th>Purchasing Power Parity USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>3988</td>
<td>13298</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>406</td>
<td>1870</td>
</tr>
<tr>
<td>Brazil</td>
<td>3284</td>
<td>8195</td>
</tr>
<tr>
<td>Chile</td>
<td>5836</td>
<td>10874</td>
</tr>
<tr>
<td>China</td>
<td>1490</td>
<td>5896</td>
</tr>
<tr>
<td>India</td>
<td>640</td>
<td>3139</td>
</tr>
<tr>
<td>Indonesia</td>
<td>1184</td>
<td>3609</td>
</tr>
<tr>
<td>Malaysia</td>
<td>4753</td>
<td>10276</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>1033</td>
<td>4390</td>
</tr>
<tr>
<td>Thailand</td>
<td>2539</td>
<td>8090</td>
</tr>
<tr>
<td>Venezuela</td>
<td>4214</td>
<td>6043</td>
</tr>
</tbody>
</table>

Source: Human Development Report 2006

Relative Growth Rates of National and Per Capita Income

In addition to having much lower levels of per capita income, many developing countries and regions have experienced slower GNP growth than the developed nations. But the situation is improving since 1990s.


<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>0.3</td>
<td>2.2</td>
<td>2.7</td>
</tr>
<tr>
<td>Nigeria</td>
<td>-3.0</td>
<td>2.5</td>
<td>5.4</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>1.0</td>
<td>4.8</td>
<td>5.2</td>
</tr>
<tr>
<td>India</td>
<td>3.2</td>
<td>6</td>
<td>6.2</td>
</tr>
<tr>
<td>Indonesia</td>
<td>4.1</td>
<td>4.2</td>
<td>4.6</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>2.4</td>
<td>5.3</td>
<td>3.7</td>
</tr>
<tr>
<td>Brazil</td>
<td>0.6</td>
<td>2.9</td>
<td>2.0</td>
</tr>
<tr>
<td>Mexico</td>
<td>-0.9</td>
<td>3.1</td>
<td>1.5</td>
</tr>
<tr>
<td>Venezuela</td>
<td>-2.0</td>
<td>1.6</td>
<td>-1.2</td>
</tr>
</tbody>
</table>
Distribution of National Income

The growing gap in per capita incomes between rich and poor nations is not the only manifestation of the widening economic disparity between the world’s rich and poor. To appreciate the breadth and depth of Third World poverty, it is also necessary to look at the growing gap between rich and poor within individual LCDs.

Table 3: Global Income Disparity between the Richest and Poorest 20 Percent of selected countries during 1999-2003

<table>
<thead>
<tr>
<th>Year</th>
<th>Poorest 20%</th>
<th>Richest 20%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>3.2</td>
<td>56.8</td>
</tr>
<tr>
<td>Chile</td>
<td>3.3</td>
<td>62.2</td>
</tr>
<tr>
<td>Malaysia</td>
<td>4.4</td>
<td>54.3</td>
</tr>
<tr>
<td>Brazil</td>
<td>2.6</td>
<td>62.1</td>
</tr>
<tr>
<td>Thailand</td>
<td>6.3</td>
<td>49.0</td>
</tr>
<tr>
<td>Venezuela</td>
<td>4.7</td>
<td>49.3</td>
</tr>
<tr>
<td>China</td>
<td>4.7</td>
<td>50.0</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>8.3</td>
<td>42.2</td>
</tr>
<tr>
<td>Indonesia</td>
<td>8.4</td>
<td>43.3</td>
</tr>
<tr>
<td>Egypt</td>
<td>8.6</td>
<td>43.6</td>
</tr>
<tr>
<td>South Africa</td>
<td>3.5</td>
<td>62.2</td>
</tr>
<tr>
<td>India</td>
<td>8.9</td>
<td>43.3</td>
</tr>
<tr>
<td>Pakistan</td>
<td>9.3</td>
<td>40.3</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>9.0</td>
<td>41.3</td>
</tr>
</tbody>
</table>

Source: Human Development Report 2006

Extent of Poverty

The magnitude and extent of poverty in any country depends on two factors: the average level of national income and the degree of inequality in its distribution. Clearly, for any given level of national per capita income, the more unequal the distribution, the greater the incidence of poverty. Similarly, for any given distribution, the lower the average income level, the greater the incidence of poverty.
Table 4: Income poverty by region, selected year 2001

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of people living below $1 per day ($1.08 per day) (Million)</th>
<th>Head Count Indices: Percentage of Population living below $1 per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Asia</td>
<td>271.3 (24.8)</td>
<td>14.9</td>
</tr>
<tr>
<td>of which China</td>
<td>211.6 (19.4)</td>
<td>16.6</td>
</tr>
<tr>
<td>Eastern Europe &amp; Central Asia</td>
<td>17.6 (1.6)</td>
<td>3.7</td>
</tr>
<tr>
<td>Latin America &amp; Caribbean</td>
<td>49.8 (4.6)</td>
<td>9.5</td>
</tr>
<tr>
<td>Middle East &amp; North Africa</td>
<td>7.1 (0.6)</td>
<td>2.4</td>
</tr>
<tr>
<td>South Asia</td>
<td>431.1 (39.5)</td>
<td>31.3</td>
</tr>
<tr>
<td>of which India</td>
<td>358.6 (32.8)</td>
<td>34.7</td>
</tr>
<tr>
<td>Sub Saharan Africa</td>
<td>315.8 (28.9)</td>
<td>46.9</td>
</tr>
</tbody>
</table>

Source: How have the world’s poorest fared since the early 1980s: Shaohua Chen & Martin Ravallion, Development Research Group, World Bank

**Electricity**

Consumption of electricity is an important indicator of development. It is revealed from the Figure 2 that there is a wide disparity in the consumption of electricity.

**Figure 2 - Per Capita Electricity Consumption**
Health

In addition to struggling on low income, many people in developing nations fight a constant battle against malnutrition, disease and ill health. Although there have been some significant improvements since the 1960s.

### Table 5: Survival: progress and setbacks

<table>
<thead>
<tr>
<th>Country</th>
<th>Life Expectancy at Birth 2000-05</th>
<th>Infant Mortality Rate 2004 (per 1000 life birth)</th>
<th>Under five Mortality Rate 2004 (per 1000 life birth)</th>
<th>Maternal Mortality Rate (per 100,000 live birth) 1990-04</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>74.3</td>
<td>16</td>
<td>18</td>
<td>44</td>
</tr>
<tr>
<td>Chile</td>
<td>77.9</td>
<td>8</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>Malaysia</td>
<td>73</td>
<td>10</td>
<td>12</td>
<td>30</td>
</tr>
<tr>
<td>Brazil</td>
<td>70.3</td>
<td>32</td>
<td>34</td>
<td>64</td>
</tr>
<tr>
<td>Thailand</td>
<td>69.7</td>
<td>18</td>
<td>21</td>
<td>24</td>
</tr>
<tr>
<td>Venezuela</td>
<td>72.8</td>
<td>16</td>
<td>19</td>
<td>68</td>
</tr>
<tr>
<td>China</td>
<td>71.5</td>
<td>26</td>
<td>31</td>
<td>51</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>73.9</td>
<td>12</td>
<td>14</td>
<td>92</td>
</tr>
<tr>
<td>Indonesia</td>
<td>66.5</td>
<td>30</td>
<td>38</td>
<td>310</td>
</tr>
<tr>
<td>Egypt</td>
<td>69.6</td>
<td>26</td>
<td>36</td>
<td>84</td>
</tr>
<tr>
<td>South Africa</td>
<td>49</td>
<td>54</td>
<td>67</td>
<td>150</td>
</tr>
<tr>
<td>India</td>
<td>63.1</td>
<td>62</td>
<td>85</td>
<td>540</td>
</tr>
<tr>
<td>Pakistan</td>
<td>62.9</td>
<td>80</td>
<td>101</td>
<td>530</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>62.6</td>
<td>56</td>
<td>77</td>
<td>380</td>
</tr>
<tr>
<td>Nigeria</td>
<td>43.3</td>
<td>101</td>
<td>197</td>
<td>..</td>
</tr>
</tbody>
</table>

Source: Human Development Report 2006

Education

As a final illustration of the very low levels of living that are pervasive in developing nations, consider the spread of educational opportunities. The attempt to provide primary school educational opportunities has probably been the most significant of all LDC development efforts. In spite of some impressive quantitative advances in school enrolments, literacy levels remain strikingly low compared with the developed nations.

### Table 6

<table>
<thead>
<tr>
<th>Country</th>
<th>Adult Literacy (% of ages 15 and above) 2004</th>
<th>Children reaching Grade 5 (% of grade 1 students) 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>97.2</td>
<td>84</td>
</tr>
<tr>
<td>Chile</td>
<td>95.7</td>
<td>99</td>
</tr>
<tr>
<td>Malaysia</td>
<td>88.7</td>
<td>98</td>
</tr>
<tr>
<td>Thailand</td>
<td>92.6</td>
<td>..</td>
</tr>
</tbody>
</table>

120
<table>
<thead>
<tr>
<th>Country</th>
<th>Adult Literacy (% of ages 15 and above) 2004</th>
<th>Children reaching Grade 5 (% of grade 1 students) 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Venezuela</td>
<td>93.0</td>
<td>91</td>
</tr>
<tr>
<td>China</td>
<td>90.9</td>
<td>..</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>90.7</td>
<td>..</td>
</tr>
<tr>
<td>Indonesia</td>
<td>90.4</td>
<td>92</td>
</tr>
<tr>
<td>Egypt</td>
<td>71.4</td>
<td>99</td>
</tr>
<tr>
<td>South Africa</td>
<td>82.4</td>
<td>84</td>
</tr>
<tr>
<td>India</td>
<td>61.0</td>
<td>79</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>0</td>
<td>65</td>
</tr>
</tbody>
</table>

Source: Human Development Report 2006

We can list the following common characteristics of developing countries:

1. Low relative levels and in many countries slow growth rates of national income.
2. Low levels and in many countries stagnating rates of real income per capita growth.
3. Highly skewed patterns of income distribution, with the top 20% of the population receiving 5 to 10 times as much income as the bottom 40%.
4. Consequently, great masses of Third World populations suffering from absolute poverty, with up to 1.3 billion people living on subsistence incomes of less than $370 per year.
5. Large segments of populations suffering from ill health, malnutrition and debilitating diseases, with infant mortality rates running as high as 10 times those in developed nations.
6. In education, low levels of literacy, significant school dropout rates, and inadequate and often irrelevant educational curricula and facilities.

Most important is the interaction of all six characteristics, which tends to reinforce and perpetuate the pervasive problems of “poverty, ignorance and disease” that restrict the lives of so many people in the developing world.

High Rates of Population Growth and Dependency Burdens

More than four-fifths of world’s population live in the less developed countries and less than one-fifth in the developed nations. Both birth and death rates are strikingly different between the two groups of countries. Birth rates in less developed countries are generally very high. Whereas those in the developed countries are less than half that figure. Indeed, as shown in Table 7, the crude birthrate (the yearly number of live birth per 1,000 population) is probably one of the most efficient ways of distinguishing the less developed from the developed countries. There are few less developed countries with a birth rate below 20 per 1,000 and no developed nations with a birth rate above it.

Death rates (the yearly number of deaths per 1,000 population) in Third World countries are also high relative to the developed nations, but thanks to improved health conditions and the control of major infectious diseases, the differences are substantially smaller than the corresponding differences in birthrates. As a result, the average rate of population growth is now about 2.0% per year in Third World countries (2.3% excluding China), compared to population growth of 0.5% per year in the industrialized world.
A major implication of high LDC birthrates is that children under age 15 make up almost 40% of the total population in these countries, as opposed to less than 21% of the total population in the developed countries. In most developing countries, the active labour force has to support proportionally almost twice as many children as it does in richer countries. By contrast, the proportion of people over the age of 65 is much greater in the developed nations. Both older people and children are often referred to as an economic dependency burden in the sense that they are non productive members of society and therefore must be supported financially by a country’s labour force (usually defined as citizens between the ages of 15 and 64). The overall dependency burden (i.e both young and old) represents only about one-third of the populations of developed countries but almost 45% of the populations of the less developed nations. Moreover, in the latter countries, almost 90% of the dependents are children, whereas only 66% are children in the richer nations.

### Table 7: Crude Birth rates throughout the World, 1996

<table>
<thead>
<tr>
<th>Crude Birthrate</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-49</td>
<td>Mali, Angola, Chad, Burkina Faso, Sierra Leone, Burundi, Somalia, Congo, Rep., Malawi, Benin, Guinea, Mauritania, Nigeria, Rwanda, Zambia, Ethiopia, Yemen, Rep.,</td>
</tr>
<tr>
<td>30-39</td>
<td>Eritrea, Kenya, Madagascar, Mozambique, Togo, Côte d’Ivoire, Tanzania, Senegal, Cameroon, Gambia, The, Guatemala, Lao PDR, West Bank and Gaza, Swaziland, Sudan, Ghana, Cambodia, Gabon, Haiti, Papua New Guinea, Zimbabwe</td>
</tr>
<tr>
<td>25-29</td>
<td>Bolivia, Honduras, Nepal, Paraguay, Tajikistan, Lesotho, Nicaragua, Syrian Arab Republic, Bangladesh, Jordan, Pakistan, Saudi Arabia, Botswana, Egypt, Arab Rep, Oman, Philippines</td>
</tr>
<tr>
<td>20-24</td>
<td>Dominican Republic, El Salvador, India, South Africa, Ecuador, Libya, Morocco, Namibia, Peru, Kyrgyz Republic, Malaysia, Mongolia, Panama, Turkmenistan, Venezuela, RB, Algeria, Colombia, Israel, Uzbekistan, Brazil, Indonesia, Myanmar</td>
</tr>
<tr>
<td>15-19</td>
<td>Iran, Islamic Rep, Kuwait, Lebanon, Mexico, Sri Lanka, Turkey, Argentina, Jamaica, Vietnam, Albania, Costa Rica, Tunisìa, Azerbaijan, Chile, Ireland, Korea, Dem. Rep, Mauritius, Thailand, United Arab Emirates, Kazakhstan, Uruguay</td>
</tr>
<tr>
<td>10-14</td>
<td>New Zealand, Puerto Rico, Trinidad and Tobago, United States, Australia, France, Armenia, China, Denmark, Macedonia, FYR, Netherlands, Norway, United Kingdom, Belgium, Cuba, Finland, Georgia, Russian Federation, Serbia and Montenegro, Spain, Sweden, Austria, Canada, Czech Republic, Estonia, Italy, Moldova, Portugal, Romania, Singapore, Slovak Republic, Switzerland</td>
</tr>
<tr>
<td>9</td>
<td>Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Germany, Greece, Hungary, Japan, Korea Rep., Latvia, Lithuania, Poland, Slovenia, Ukraine</td>
</tr>
</tbody>
</table>

Source: World Development Indicator 2006
We may conclude, therefore, that not only are Third World countries characterized by higher rates of population growth, but they must also contend with greater dependency burdens than rich nations.

**Substantial Dependence on Agricultural Production and Primary Product Exports**

The vast majority of people in LDCs live and work in rural areas. Over 65% are rurally based, compared to less than 27% in economically developed countries. Similarly, 58% of the labour force is engaged in agriculture, compared to only 5% in developed nations. Agriculture contributes about 14% of the GNP of developing nations but only 3% of the GNP of developed nations.

The basic reason for the concentration of people in agricultural and other primary production activities in developing countries is the simple fact that at low income levels, the first priorities of any person are food, clothing and shelter. Agricultural productivity is low not only because of the large numbers of people in relation to available land but also because LDC agriculture is often characterized by primitive technologies, poor organization, and limited physical and human capital inputs. Technological backwardness persists because Third World agriculture is predominantly non commercial peasant farming. In many part of the world, especially in Asia and Latin America, it is characterized further by land tenure arrangements in which peasants rent rather than own their small plots of land.

**Table 8 indicates the agricultural share of the Gross Domestic Product.**

<table>
<thead>
<tr>
<th>Country</th>
<th>Agricultural Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>10</td>
</tr>
<tr>
<td>Brazil</td>
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<tr>
<td>Bangladesh</td>
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<td>Burundi</td>
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<td>Cameroon</td>
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<td>Chile</td>
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<td>China</td>
<td>13</td>
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<tr>
<td>Costa Rica</td>
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<td>Ghana</td>
<td>38</td>
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<td>Guatemala</td>
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<td>India</td>
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<td>Indonesia</td>
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<td>Kenya</td>
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<td>Malawi</td>
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<td>Nicaragua</td>
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<td>Sri Lanka</td>
<td>18</td>
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<tr>
<td>Thailand</td>
<td>10</td>
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<td>Venezuela</td>
<td>5</td>
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<tr>
<td>Zambia</td>
<td>21</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>18</td>
</tr>
</tbody>
</table>

Source World Development Indicator 2006
**Dependence on Primary Exports**

Most economics of less developed countries are oriented towards the production of primary products (agriculture, fuel, forestry and raw materials) as opposed to secondary (manufacturing) and tertiary (service) activities. These primary commodities form their main exports to other nations (both developed and less developed). For example, all non Asian developing countries, the primary products account for over 70% of exports. Except in countries blessed with abundant supplies of petroleum and other valuable mineral resources and a few leading Asian exporters of manufactured goods, most LDC exports consist of basic foodstuffs, non food cash crops and raw materials. In sub Saharan Africa, for example primary products account for over 80% of total export earnings.

**Prevalence of Imperfect Markets and Incomplete Information**

There seemed to be a growing consensus that there had been too much government intervention in the workings of Third World economies and that free markets and unfettered competition held the key to rapid economic growth. In the developing countries information is limited and costly to obtain, thereby often causing goods, finances and resources to be misallocated. Whether or not these imperfect markets and incomplete information systems justify a more active role for government (which is also subject to similar problems of incomplete and imperfect information) is an issue. But their existence remains a common characteristic of developing nations and an important contributing factor to their state of underdevelopment.

**Dominance, Dependence and Vulnerability in International Relations**

For many less developed countries, a final significant factor contributing to the persistence of low levels of living, rising unemployment and growing income inequality is the highly unequal distribution of economic and political power between rich and poor nations.

**Concept of Human Development**

We are rediscovering the essential truth that people must be at the centre of all development. The purpose of development is to offer people more options. One of their options is access to income — not as an end in itself but as a means to acquiring human well-being. But there are other options as well, including long life, knowledge, political freedom, personal security, community participation and guaranteed human rights. People cannot be reduced to a single dimension as economic creatures. What makes them and the study of the development process fascinating is the entire spectrum through which human capabilities are expanded and utilised.

UNDP has undertaken to produce an annual report on the human dimension of development. The Human Development Report 1990 is the first such effort.
The central message of the Human Development concept is that while growth in national production (GDP) is absolutely necessary to meet all essential human objectives, what is important is to study how this growth translates — or fails to translate — into human development in various societies. Some societies have achieved high levels of human development at modest levels of per capita income. Other societies have failed to translate their comparatively high income levels and rapid economic growth into commensurate levels of human development. What were the policies that led to such results? In this line of enquiry lie promising seeds of a much better link between economic growth and human development, which is by no means automatic.

The basic objective of development is to create an enabling environment for people to enjoy long, healthy and creative lives. This may appear to be a simple truth. But it is often forgotten in the immediate concern with the accumulation of commodities and financial wealth.

Human development is a process of enlarging people's choices. In principle, these choices can be infinite and change over time. But at all levels of development, the three essential ones are for people to lead a long and healthy life, to acquire knowledge and to have access to resources needed for a decent standard of living. If these essential choices are not available, many other opportunities remain inaccessible. But human development does not end there.

**Political freedom and human development**

The purpose of human development is to increase people's range of choices. If they are not free to make those choices, the entire process becomes a mockery. So, freedom is more than an idealistic goal; it is a vital component of human development. People who who are politically free can take part in planning and decision-making and they can ensure that society is organized through consensus and consultation rather than dictated by autocratic elite.

There clearly are many kinds of freedom, for example, freedom to vote, or freedom from hunger. So, any form of measurement must start with a system of classification and selection. Freedom can be grouped into five broad clusters, reflecting values common to all cultures, all religions and all stages of development.

1. Personal security
2. Rule of law
3. Freedom of expression
4. Political participation
5. Equality of opportunity

**People's participation and Human development**

People's participation is becoming the central issue of our time. Participation, from the human development perspective, is both a means and an end. Human development stresses the need to invest in human capabilities and then ensure that those capabilities are used for the benefit of all. Greater participation has an important part to play here: it helps maximize the use of human capabilities and is thus a means of
increasing levels of social and economic development. But human development is also concerned with personal fulfilment. So, active participation which people to realize their full potential and make their best contribution to society is also an end in itself.

**Gender and Human development**

Human development is a process of enlarging the choices for all people, not just for one part of society. Such a process becomes unjust and discriminatory if most women are excluded from its benefits. And the continuing exclusion of women from many economic and political opportunities is a continuing indictment of modern progress. For too long, it was assumed that development was a process that lifts all boats, that its benefits trickled down to all income classes—and that it was gender-neutral in its impact. Experience teaches otherwise. Wide income disparities and gender gaps stare us in the face in all societies. Moving towards gender equality is not a technocratic goal—it is a political process. It requires a new way of thinking—in which the stereotyping of women and men gives way to a new philosophy that regards all people, irrespective of gender, as essential agents of change.

**Globalisation and Human development**

Globalization is a process integrating not just the economy but culture, technology and governance. People everywhere are becoming connected—affected by events in far corners of the world. The collapse of the Thai baht not only threw millions into unemployment in South-East Asia—the ensuing decline in global demand meant slowdowns in social investment in Latin America and a sudden rise in the cost of imported medicines in Africa.

This era of globalization is opening many opportunities for millions of people around the world. Increased trade, new technologies, foreign investments, expanding media and Internet connection are fuelling economic growth and human advance. The challenge is to find the rules and institutions for stronger governance—local, national, regional and global—to preserve the advantages of global markets and competition, but also to provide enough space for human, community and environmental resources to ensure that globalization works for people—not just for profits.

Since the 1980s many countries have seized the opportunities of economic and technological globalization. Beyond the industrial countries, the newly industrializing East Asian tigers are joined by Chile, the Dominican Republic, India, Mauritius, Poland, Turkey and many others linking into global markets, attracting foreign investment and taking advantage of technological advance.

**Economic growth and Human development**

Economic growth is essential for human development, but to exploit fully the opportunities for improved well-being that growth offers, it needs to be properly managed. Some developing countries have been very successful in managing their growth to improve the human condition, others less so. There is no automatic link between economic growth and human progress. One of the most pertinent policy issues concerns the exact process through which growth translates, or fails to translate, into human development under different development conditions.
Human development is the end-economic growth a means. So, the purpose of growth should be to enrich people's lives. But far too often it does not. The recent decades show all too clearly that there is no automatic link between growth and human development. And even when links are established, they may gradually be eroded—unless regularly fortified by skilful and intelligent policy management.

Table 9 indicates that development must, therefore, be more than just the expansion of income and wealth. It is revealed that GNP per capita in South Africa is as high as 4675 US Dollar. But the life expectancy, adult literacy, infant mortality rate and under five mortality rate are 47 years, 82.4 percent, 54 and 67 respectively. On the other hand, GNP per capita in Sri Lanka is as low as 1033 US dollar. But the life expectancy, adult literacy, infant mortality and under five mortality rate are 74.3, 90.7%, 12 and 14 respectively.

<table>
<thead>
<tr>
<th>Country</th>
<th>GNP per capita (US$)</th>
<th>Human Development Index</th>
<th>Life expectancy (years)</th>
<th>Adult literacy</th>
<th>Infant mortality (per 1,000 live births)</th>
<th>Under Five Mortality rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>4675</td>
<td>0.653</td>
<td>47.0</td>
<td>82.4</td>
<td>54</td>
<td>67</td>
</tr>
<tr>
<td>Venezuela</td>
<td>4214</td>
<td>0.784</td>
<td>73.0</td>
<td>93.0</td>
<td>16</td>
<td>19</td>
</tr>
<tr>
<td>Tunisia</td>
<td>2838</td>
<td>0.760</td>
<td>73.5</td>
<td>74.3</td>
<td>21</td>
<td>25</td>
</tr>
<tr>
<td>Equador</td>
<td>2322</td>
<td>0.765</td>
<td>74.5</td>
<td>91.0</td>
<td>23</td>
<td>26</td>
</tr>
<tr>
<td>China</td>
<td>1490</td>
<td>0.765</td>
<td>71.9</td>
<td>90.9</td>
<td>26</td>
<td>31</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>1033</td>
<td>0.755</td>
<td>74.3</td>
<td>90.7</td>
<td>12</td>
<td>14</td>
</tr>
</tbody>
</table>

Source: Human Development Report 2006

**Typology of country experience**

The human development experience in various countries during the last three decades reveals three broad categories of performance. First are countries that sustained their success in human development, sometimes achieved very rapidly, sometimes more gradually. Second are countries that had their initial success slow down significantly or sometimes even reverse. Third are countries that had good economic growth but did not translate it into human development. From these country experiences emerges the following typology:

- Sustained human development, as in Botswana, Costa Rica, the Republic of Korea, Malaysia and Sri Lanka.
- Disrupted human development, as in Chile, China, Colombia, Jamaica, Kenya and Zimbabwe.
- Missed opportunities for human development, as in Brazil, Nigeria and Pakistan.
Figure 3 shows that Venezuela and South Africa have similar income but different Human Development Index (HDI).

Figure 4 highlights that Equador, Tunisia, China and Sri Lanka have different per capita income but have similar Human Development Index.

The analysis of these country cases leads to several important conclusions.
First, growth accompanied by an equitable distribution of income appears to be the most effective means of sustained human development. The Republic of Korea is a stunning example of growth with equity.

Second, countries can make significant improvements in human development over long periods - even in the absence of good growth or good distribution - through well-structured social expenditures by governments (Botswana, Malaysia and Sri Lanka).

Third, well-structured government social expenditures can also generate fairly dramatic improvements in a relatively short period. This is true not only for countries starting from a low level of human development but also for those that already have moderate human development (Chile and Costa Rica).

Fourth, to maintain human development during recessions and natural disasters, targeted interventions may be necessary (Botswana, Chile, Zimbabwe and the Republic of Korea in 1979-80).

Fifth, growth is crucial for sustaining progress in human development in the long run, otherwise human progress may be disrupted (Chile, Colombia, Jamaica, Kenya and Zimbabwe).

Sixth, despite rapid periods of GNP growth, human development may not improve significantly if the distribution of income is bad and if social expenditures are low (Nigeria and Pakistan) or appropriated by those who are better off (Brazil).

Finally, while some countries show considerable progress in certain aspects of human development (particularly in education, health and nutrition), this should not be interpreted as broad human progress in all fields, especially when we focus on the question of democratic freedoms. The main policy conclusion is that economic growth, if it is to enrich human development, requires effective policy management.

Conversely, if human development is to be durable, it must be continuously nourished by economic growth. Excessive emphasis on either economic growth or human development will lead to developmental imbalances that, in due course, will hamper further progress.
THE HUMAN DEVELOPMENT APPROACH

Time - One hour thirty minutes

Learning Outcomes:-

Knowledge acquired through this module will allow the participants to:-

- Explain concept of welfare
- Discuss Four Pillars of Human Development
- State the Human Development Dimensions
- Discuss Growth & Human Development

Interactive Session

The Specificity of Human Development

HD is often confused with, or reduced to, some more specific notions in the field of development. It should therefore be noted that HD is conceptually related but clearly different from notions such as:

- Human capital
- Human resources
- Social development
- Satisfaction of “basic human needs”
- Poverty eradication programs
- Adjustment with human face
- Human rights

One of the most common misconceptions is to treat human development as being synonymous with human capital and human resource development. Human capital is a term coined by Schultz in 1960s to refer to the stock of skills and productive knowledge embodied in people. Just as physical capital (machines, equipment, assets and so on) make a contribution to the national income, Schultz argued that individuals, through the human capital embodied in them, also make a contribution to national income. Thus, human capital and the human resource development framework that is based on the concept of human capital, consider human beings mainly as a means to the end which is higher national income. The investment made in people in terms of education, health, nutrition is justified in terms of the ‘rate of return’ it yields to the individual as well as to the family and society.

The human development paradigm, on the other hand, regards people as ends in themselves, and not as means to an end. Thus, the education, health, nutrition that are embodied in people are valuable in themselves not because they enable people to contribute to the national income. Investment in individuals is not justified in terms of rates of return logic but because it enhances their capabilities.
Having distinguished between the two concepts, it is necessary to recognize that the two concepts are linked. Human development provides the foundations for human resources to contribute better to national income. For example, the returns to education are higher when the bulk of the population has a minimum level of learning rather than a few individuals acquiring higher levels of learning while the majority is illiterate.

What differentiates HD from other theories and methodologies of development is the “holistic” or integrative character of HD. The HD approach strives to simultaneously achieve the three basic developmental values of efficiency, equity, and freedom.

a. **Efficiency** is defined as the optimal use of existing resources. From an HD perspective, it is the maximum enlargement of the material base for the satisfaction of human choices. The value of efficiency is crucial to the HD paradigm because, as any other theory of development, it must deal with how to increase the availability of goods and services to satisfy human needs.

b. **Equity** corresponds to commutative and distributive justice, particularly to the apportionment of opportunities among different human beings. Equity is the main value underlined by critics of the prevailing or “neoliberal” model, and enters the HD paradigm from these socially based criticisms.

c. **Freedom**, that is, the possibility of choosing, comes to be the bridge laid by the HD approach between efficiency and equity. As Sen puts it, freedom has a “constitutive” and an “instrumental” value; freedom is valuable in itself and valuable as a means both to potentiate human energies (efficiency) and for everybody’s needs and preferences to impinge upon the apportionment of opportunities (equity).

HD thus advocates for a new synthesis among the three cardinal developmental values of our time. It is “pluralist” and “holistic” in that it pursues efficiency, equity and freedom simultaneously, and in that it strives to find out the “synergies” or virtuous circles leading from each of these values to the others.

Let us look at some synergies. The redistribution of social opportunities widens the market and increases the productivity of workers: equity bringing about efficiency. The existence of liberties allows for creativity to flourish and thus enhances efficiency. Or, a prosperous economy provides more opportunities for personal fulfillment, whereby efficiency contributes to the stability of democratic freedoms.

Equity makes public deliberations among equals possible for human beings; hence freedom grows along with equality.
Why did the HD paradigm arise?

HD has generated worldwide interest and controversy, both in the academic community and among policy makers and planners. To quote Mahbub ul Haq, “the obvious is often the most difficult to see”. It is obvious - but difficult to see - development in terms of enlarging people’s choices. Thanks to the internal evolution of both political philosophy and the theory of economic development, such an obvious fact was “discovered” during the last two decades or so. But besides this internal reason, there were some external circumstances that help explain the emergence of the new paradigm.

a. The notion of “human development” served to unify the many voices unsatisfied with the prevailing reduction of development to economic growth. All those unsatisfied with conventional economic models, those concerned with social justice, the environmentalists, and the excluded minorities found in HD a solid and coherent formulation of their basic intuitions.

b. The new paradigm evolved side by side with the so-called “third wave of representative democracy”, which began in Latin America, swept off the Berlin Wall, gained 17 countries in Eastern Europe, reached Africa and Asia, and completed some 67 democratized countries. Participatory democracy has been advancing as well and is being affirmed through such institutions as referendum, plebiscite, popular consultation, and other forms of grass roots decision-making. At the same time minorities (religious, national, ethnic, gender, and lifestyle-related) in many countries claimed and found acknowledgement of their rights.

c. A third impulse to the HD paradigm came from the “discovery” of yet another obvious point: that the key to economic growth is not to be found in any of the three classic “factors of production”—natural resources, capital, and non-qualified labor; the key is in the human brain. Thus, some 90% of the price you pay for a CD goes to the interpreter, the songwriter, the
cover designer, and similar creative talents; 80% of the retail price of an average computer is meant to cover royalties, and when you buy an automotive vehicle, three fourths of each dollar go to expenses in engineering, design, marketing, and other "intellectual" inputs.

d. The HD paradigm appeared simultaneously with the “knowledge revolution”, which many see as the defining characteristic of our time. It is of course quite difficult to measure the advancement of knowledge. It is estimated that 95% of all accumulated knowledge dates from the 20th century. In the last 25 years, we have learned three times as much as all throughout the previous millennia.

e. The revolution of knowledge is closely associated with an extraordinary increase of richness—the fourth force impelling the HD paradigm. It has been estimated that the value of goods and services produced by humankind after World War II is equivalent to that of whatever was produced during the previous half million years. The current generation has as much wealth as that of all the previous generations combined. This yields an extraordinary opportunity to enhance the standard of living and to enlarge the choices for everyone. Today we are in condition to deal with the problem of ensuring an extended, educated and worthy life for all human beings.

f. Lastly, HD coincides with the spreading recognition that, regardless of nationality, race or ethnic origin, language, religion, gender, or any other consideration, we all have civil, political, economic, social, and cultural inalienable rights. This new consciousness is a major endorsement to HD, an endorsement reinforced by legislation and public actions in many countries, as well as by a host of international conventions.

**Human Development: moving from concepts and analysis to action**

The HD concept and approach has been widely discussed and well received also thanks to the preparation of Human Development Reports (HDRs). UNDP has pioneered the preparation of HDRs. The publication of the first HDR in 1990 could be considered as a landmark. In fact for the first time countries were ranked according to their performance in human development rather than on GNP.

Fourteen HDRs have been prepared at the global level to provide information on the state of human development in the world, country-by-country and region-by-region. In addition to the annual update on the set of human development indicators and composite indices, each year a fresh theme is chosen for in-depth analysis.

After the advent of global reports, many countries have engaged in the preparation of national level HDRs. In India the Planning Commission, Government of India has prepared a National HDR in 2002, defining a human profile for India. But many large countries have also engaged in the preparation of sub-national HDRs. In India the preparation of State HDRs, pioneered with the preparation of the Madhya Pradesh HDR (MPHDR) in 1995, has helped to highlight the diversity and disparities existing within States.
HDRs are a tool for action. In fact while highlighting human development issues they provide suggestions on policy interventions required and on the need to focus attention on particular issues. In the case of Madhya Pradesh, for example, the MPHDR has helped to mainstream the concerns, debate and action on human development. Further, it helped to shift attention on basic minimum services, with the remarkable increase in their share of Plan investment (from 18.73 per cent in the Eighth Plan to 42.37 per cent in the Ninth Plan).

The State HDRs published so far are: Himachal Pradesh HDR (2002), Karnataka HDR (1999), Maharashtra HDR (2002), Madhya Pradesh HDR (1995, 1998, 2002), Rajasthan HDR (2002), Sikkim HDR (2001), Assam (2003), West Bengal (2004), Orissa (2004), Punjab (2004), Kerala (2005) and Tamil Nadu HDR (2003). Other States are in the process of finalizing their respective reports (e.g. Uttar Pradesh etc.). In West Bengal two District HDRs have been published.

GROUP EXERCISE 1

Form participants into State-wise or district-wise groups and ask them to prepare an outline profile of human development for their State/district. Give each group a check-list of elements for the profile, which should be presented as a chart/poster.

Checklist to prepare human development profile of your State/District

Education:  
a) Literacy Rate (disaggregated by sex)  
b) Primary enrolment rate (disaggregated by sex)  
c) Drop out rate (Classes I-V) (disaggregated by sex)  
d) Teacher-pupil ratio  
e) No. of schools per thousand population

Health:  
a) Infant Mortality Rate (IMR)  
b) Under Five Mortality Rate (U5 MR)  
c) Life expectancy at birth  
d) No. of hospital beds per lakh population  
e) Rural population per Primary Health Centre (PHC)

Livelihood:  
a) Per capita income  
b) Workforce Participation Rate (Male and Female)

Demography:  
a) Sex Ratio  
b) Decadal growth of population

Infrastructure:  
a) Percentage of households with potable water supply  
b) Percentage of households with access to toilets  
c) Percentage of electrified villages

If possible please provide data for two time points.

Share profiles in the plenary and discuss key issues. Include five indicators which in your opinion, data should be collected on a regular basis.
A Human Development Profile for India

Several significant changes have taken place in India since independence. There has been visible progress in the economic sphere with adoption of new technologies, diversified production, and sophisticated management. Macro-economic indicators have shown a distinct upswing in the last few years.

### Select Macroeconomic Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2003-04</th>
<th>2004-05</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. GDP at factor cost in Rs. Crores at 1999-2000 prices</td>
<td>2208196 (P)</td>
<td>2376729 (Q)</td>
</tr>
<tr>
<td>2. Per capita Net National Product at 1999-2000 prices</td>
<td>18517 (P)</td>
<td>19649 (P)</td>
</tr>
<tr>
<td>3. Foreign exchange reserves in Rs. Crores</td>
<td>490129</td>
<td>619116</td>
</tr>
<tr>
<td>4. Food grains (million tones)</td>
<td>213.5</td>
<td>204.6</td>
</tr>
</tbody>
</table>


Notes: (P) – Provisional Estimates (Q) – Quick Estimates

Changes have also taken place in the social sphere. Affirmative action for disadvantaged communities has weakened practices such as untouchability and caste discrimination. Women by and large enjoy more freedoms than ever before. On the political front, India is acknowledged to be a vibrant democracy with increased participation by women and men in political decision making.

However, when viewed through the lens of HD, the glass can be considered half-full or half-empty. Much depends upon the eye of the beholder. The country has recorded impressive gains in many areas, with significant reductions in the intensity of poverty, but there is still much ground to cover in terms of ending human deprivations.

Between 1951 and 2000, per capita income more than doubled, foodgrain production increased fourfold, and the index of industrial production went up 15 times. Still around 26.10% (1999-2000) of the country’s population lives below the poverty line - defined as access to minimum calories needed for healthy living. The country has achieved self-sufficiency in foodgrain production, it has built up a good safety stock of foodgrains, and famines have been virtually eliminated. Even so, some 47% of children under three years of age remain malnourished. In 1951, the country had only 725 primary health care centres. This increased to more than 154,000 primary health centres and sub-centres by 2000. Life expectancy nearly doubled to 61 years and infant mortality was halved to 74 deaths per 1,000 live births during 1951-2000. Current estimates put the infant mortality rate value at 71 deaths per 1000 live births. Apart from impressive achievements in higher education, the number of primary schools increased almost threfold -from 210,000 in 1951 to 590,000 in 2000. As a result, literacy nearly tripled during 1951-01. Yet almost half the population in 2001 - some 460 million people are still illiterate. Less than two-thirds of the children reach Grade V of primary schooling, and of those completing Grade V, many cannot even read or write a simple sentence. Close to 62.30% of the population is reported to have access to safe drinking water in 2001. However, problems of rapidly declining water tables, deteriorating quality and increasing contamination threaten this availability. Despite the narrowing of gender gaps along several fronts, India is one of the few countries where there are fewer women than men—933 females per 1000 males in 2001—a reflection of systematic deprivation and strong anti-female bias that pervades society.
India today remains a country of stark contrasts and striking disparities. Some states and districts of India report levels of social advancement similar to leading industrialized countries. Other parts of India report achievement levels that are worse than the average of the poorest countries in the world. For example, only 39 out of 150 countries in the world - and all of them by far richer - reported a lower infant mortality rate than Kerala’s in 1995. At the same time, only 24 countries had a higher rate of infant mortality than Orissa. The life expectancy of a girl born in Kerala today, around 74 years, is 20 years more than that of a girl born in Uttar Pradesh. Less than 15% of adult women are illiterate in Kerala. On the other hand, 66% or more women are illiterate in Bihar, Rajasthan and Uttar Pradesh. Birth rates have fallen with rising incomes and education, reduced child deaths, and improved access to family planning services. The total fertility rate is 2 or less in Kerala, Tamil Nadu and Goa. It is however 4 or more in Bihar, Haryana, Madhya Pradesh, Rajasthan, and Uttar Pradesh. Were all of India to have Kerala’s birth and child death rates, there would be 10 million fewer births and 1.5 million fewer infant deaths in the country every year - and a dramatic reduction in population growth with 13 million fewer births.

Women fare worse than men on most social indicators. A computation of the Gender-related Development Index (GDI) for Indian states reveals not only the low levels of human development and the extent of gender inequalities within India, but more importantly, it provides a measure of how badly Indian states are doing vis-a-vis other nations of the world. At the top of the list of Indian states is Himachal Pradesh with a GDI value of 0.858. Bihar is at the bottom with a GDI value of 0.469. Similarly, disparities exist between and within communities in India. For instance, communities classified as belonging to Scheduled Castes and Scheduled Tribes have significantly lower literacy and higher child mortality rates than the rest of the population.

**Comparative performance on human development: India and selected countries**

The first National Human Development Report presents the following balance sheet for the country.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Indicators</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>DEMOGRAPHY</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Total Population – 2001</td>
<td>1.02 bn</td>
</tr>
<tr>
<td>2</td>
<td>Sex Ratio – 2001</td>
<td>933</td>
</tr>
<tr>
<td>3</td>
<td>Sex Ratio Children 0-6 years – 2001</td>
<td>927</td>
</tr>
<tr>
<td>6</td>
<td>Dependency Ratio -1991</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td><strong>INCOME</strong></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Per Capita Net State Domestic Product (at 1993-94 prices, Rs.), 1998-99</td>
<td>9,647</td>
</tr>
<tr>
<td>9</td>
<td>Percentage of Female in Labour Force, 1999-2000</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td>---</td>
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</tr>
<tr>
<td>11</td>
<td>Literacy Rate - 2001 (%)</td>
<td>64.8</td>
</tr>
<tr>
<td>12</td>
<td>Male Literacy Rate - 2001 (%)</td>
<td>75.3</td>
</tr>
<tr>
<td>13</td>
<td>Female Literacy Rate - 2001 (%)</td>
<td>53.7</td>
</tr>
<tr>
<td>14</td>
<td>Rural Literacy Rate - 2001 (%)</td>
<td>58.7</td>
</tr>
<tr>
<td>15</td>
<td>Rural Male Literacy Rate - 2001 (%)</td>
<td>70.7</td>
</tr>
<tr>
<td>16</td>
<td>Rural Female Literacy Rate - 2001 (%)</td>
<td>46.1</td>
</tr>
<tr>
<td>17</td>
<td>Urban Literacy Rate - 2001 (%)</td>
<td>79.9</td>
</tr>
<tr>
<td>18</td>
<td>Urban Male Literacy Rate - 2001 (%)</td>
<td>86.3</td>
</tr>
<tr>
<td>19</td>
<td>Urban Female Literacy Rate - 2001 (%)</td>
<td>72.9</td>
</tr>
<tr>
<td>20</td>
<td>Gross Enrolment Ratio Class I - VIII (6-14 years), 2004-05</td>
<td>94.2</td>
</tr>
<tr>
<td>21</td>
<td>Boys – Gross Enrolment Ratio Class I – VIII (6-14 years), 2004-05</td>
<td>97.6</td>
</tr>
<tr>
<td>22</td>
<td>Girls – Gross Enrolment Ratio Class I – VIII (6-14 years), 2004-05</td>
<td>90.6</td>
</tr>
<tr>
<td>23</td>
<td>Teacher - Pupil ratio (Primary School), 1999-2000</td>
<td>43.0</td>
</tr>
<tr>
<td>24</td>
<td>Life Expectancy at Birth, 1999-2003</td>
<td>62.7</td>
</tr>
<tr>
<td>25</td>
<td>Life Expectancy at Birth (Male), 1999-2003</td>
<td>61.8</td>
</tr>
<tr>
<td>26</td>
<td>Life Expectancy at Birth (Female), 1999-2003</td>
<td>63.5</td>
</tr>
<tr>
<td>27</td>
<td>Infant Mortality Rate – 2005</td>
<td>58.0</td>
</tr>
<tr>
<td>28</td>
<td>Under 5 Mortality Rate - 2005</td>
<td>74.0</td>
</tr>
<tr>
<td>29</td>
<td>Maternal Mortality Rate – 2005 (per 100,000 live births)</td>
<td>450</td>
</tr>
<tr>
<td>30</td>
<td>Birth Rate – 2005</td>
<td>23.8</td>
</tr>
<tr>
<td>31</td>
<td>Infants with low birth weight (1998-2005) (%)</td>
<td>30.0</td>
</tr>
<tr>
<td>32</td>
<td>Houses with access to safe drinking water – 2001 (%)</td>
<td>77.9</td>
</tr>
<tr>
<td>33</td>
<td>Population using Improved Sanitation 2004 (%)</td>
<td>33.0</td>
</tr>
</tbody>
</table>

Source: Various Publications of Government of India & UNDP
How does this compare with other countries? The following table gives an idea.

<table>
<thead>
<tr>
<th></th>
<th>Life expectancy</th>
<th>Adult literacy</th>
<th>Real GDP per capita (PPP US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDIA</td>
<td>44.0</td>
<td>63.6</td>
<td>34</td>
</tr>
<tr>
<td>BOTSWANA</td>
<td>45.5</td>
<td>34.9</td>
<td>41</td>
</tr>
<tr>
<td>INDONESIA</td>
<td>41.2</td>
<td>67.2</td>
<td>54</td>
</tr>
<tr>
<td>CHINA</td>
<td>47.1</td>
<td>71.9</td>
<td>..</td>
</tr>
<tr>
<td>THAILAND</td>
<td>52.3</td>
<td>70.3</td>
<td>60</td>
</tr>
<tr>
<td>SOUTH KOREA</td>
<td>53.9</td>
<td>77.3</td>
<td>88</td>
</tr>
</tbody>
</table>


In 1960, the levels of income in Botswana and Indonesia were lower than in India. But by 2004, the situation was reversed. During this period, Botswana and Indonesia also recorded significantly more rapid advances in health and education than India did. Again, in 1960, South Korea and India had similar levels of per capita income. By 2004, South Korea’s income was nearly 7 times higher than India’s. This increase in income between 1960-2004 coincided with a period when life expectancy in South Korea went up from 54 years to 77.3 years. Similarly, China, Indonesia and Thailand have all achieved and sustained higher levels of per capita incomes than India because they have done much better in terms of expanding human capabilities. These countries recognized the strong complementarities between income expansion and social development. If human poverty has to be eradicated, India must also invest in people.
MEASURING HUMAN DEVELOPMENT

Time - Two hours Thirty minutes
Interactive Session - 1 Hrs 45 minutes
Exercise – 45 minutes

Learning Outcomes

Knowledge acquired through this module will allow the participants to:

✦ Explain the Human Development Index
✦ Calculate HDI
✦ Interpret the situation of a country or region in terms of its HDI
✦ Describe the relationship between HD and HDI
✦ Explain the Gender Related Development Index (GDI) & Gender Empowerment Measures (GEM)
✦ Describe Human Poverty Index

Emergence of HDI

Any measure that values a gun hundred times more than a bottle of milk is bound to raise serious questions. It is no surprise, then, that since the emergence of national income accounts, there has been a considerable dissatisfaction with gross national product as a measure of human welfare. The main drawback of GNP is that it does not take into account the non-monetised activities – household work, subsistence agriculture, unpaid services. And what is more serious, GNP is one dimensional: it fails to capture the cultural, social, political and many other choices that people make.

There has been a long search for more comprehensive measure of development that could capture all, or many more, of the choices people make – a measure that would serve as a better yardstick of the socio-economic progress of nations. The search for a new composite index of socio-economic progress began in earnest in preparing the Human Development Report under the sponsorship of UNDP. Several principles guided this search.

✦ The new human development index (HDI) would measure the basic concept of human development to enlarge people’s choices.
✦ The new index would include only a limited number of variables to keep it simple and manageable.
✦ A composite index would be constructed instead of plethora of separate indices
The new index would cover both social and economic choices

The methodology and coverage of HDI would be kept flexible – subject to gradual refinements as analytical critiques emerged and better data became available.

Even though an index can only be as good as the data fed into it, a lack of reliable and up-to-date data series was not allowed to inhibit the emergence of the HDI. Instead, HDI country rankings would act as a pressure point to persuade policy makers to invest adequate amounts in producing relevant data and to encourage international institutions to prepare comparable statistical data systems.

**The Human Development Indices**

Even though quite a number of specific measures of HD have been presented or suggested in the literature, four of them have so far consolidated within the paradigm. These measures are the Human Development Index, the Gender-related Development Index, the Gender Empowerment Measure, and the Human Poverty Index.

a. The **Human Development Index (HDI)** was designed as a means to shift the emphasis from the narrow focus on economic growth (measured by GNP) to human progress and the widening of human choices, as well as to create debate on national and international policy options. HDI measures a country’s total achievement in three dimensions of HD: longevity, knowledge, and a decent level of living. As variables it uses life expectancy at birth, educational achievement (literacy and combined gross schooling ratio), and the real adjusted per capita income.

b. The **Human Poverty Index (HPI)** measures the extent of deprivation in HDI’s three dimensions. For industrialized countries, it uses as variables the probability of dying before age 60, functional illiteracy, and the incidence of poverty and long-lasting unemployment. For developing countries, its variables are the probability of death before age 40, adult illiteracy, child malnutrition, and the percentage of population with no access to drinking water.

c. The **Gender-Related Development Index (GDI)** measures the achievement in the three dimensions and variables of HDI, but it adjusts their values according to the inequality existing between sexes: the higher gender inequality, the larger the retrogression in the country’s HDI.

d. The **Gender Empowerment Measure (GEM)** assesses women’s participation in economic and political life. As variables it uses the female share in Parliament as well as in the higher occupational categories, and the proportion between women and men’s income. HDI, HPI and GDI refer to the same set of basic human choices (life expectancy, knowledge, and standard of living). The HD Reports and the HD academic community have explored additional dimensions, including human freedom, political democracy, inequality, poverty, technological advance, human rights, and governance. Yet an introductory course can only discuss the best known measure of HD, namely, the HDI.
Calculating the Human Development Index

As stated, three major options are chosen for HDI:

a. Long lasting and healthy life,
b. Access to knowledge, and
c. Resources for a decent life

These options are selected for several reasons:

They are essential to any human life

✦ They are fairly independent from each other
✦ They cover most the spectrum of “things human beings have a good reason to value and
to desire”
✦ Relevant statistics are available for almost any country and for many populations of interest

To capture the three dimensions above the following variables are used:

a. For long lasting and healthy life, life expectancy at birth, precisely defined as “the average number of
years a newborn can expect to live in a cohort subject to the prevailing age-specific mortality rates in the
society and moment under consideration”.

b. For access to knowledge,

✦ Adult (over age 15) literacy rate, where literacy is understood as “the capability of reading,
writing and understanding a simple and short text on everyday life”; and Combined gross
enrollment ratio for population aged 6 to 23, where the combined gross enrollment ratio is the
total number of students enrolled in primary, secondary or tertiary formal education divided
by the total population in the corresponding ages.

c. For resources for a decent life, the per capita income expressed both in US dollars and in purchasing
power parity - PPP- units.

✦ The per capita income is the total value of the final goods and services produced by a country
in a given period, divided by the total population at mid-year.

✦ The per capita income, usually expressed in nominal US dollars, fails to consider the inter-
country variations in the cost of living. Units of purchasing power parity (PPP) are used to
correct this deficiency. The correction is based on calculating the international or average
price of a large series of goods and services in different countries, and in applying those standard
prices to the goods and services of the country in question. Notice that in choosing these
variables, conceptual problems do arise. In fact, it can be questioned whether or not life
expectancy is the best measure of a long lasting and healthy life; whether or not access to
knowledge could be measured with variables better than literacy and schooling, or if the
resources for a decent life could be better measured with indicators other than the per capita
income in PPP.
The several goals of HD “cannot be reduced to a single variable or merely to a number”; and “the range of HD choices is, in principle, endless”. Both statements seemingly run in the face of the HDI, which pins HD down to a number and is based in but three human choices.

The concept of HD is much broader than the three dimensions included in the HDI. For example, the HDI does not reflect political participation, governance issues or gender inequalities. This is largely because of the difficulty of adequately capturing such complex aspects of HD in a single index, and due to the absence of some generally agreed and unambiguous indicators. A fuller picture of a country’s level of HD requires an analysis of other HD indicators and information as well.

Furthermore, HDI cannot be used as a measure of HD change in the short-run, as the effect of policies to impact two of the HDI indicators—adult literacy and life expectancy—will only be felt long after having put these policies in place. As a result of this lag time, the HDI best captures long-run changes in a country’s HD situation.

Rather than a paralyzing criticism, the above points should be taken as cautionary notes in using and interpreting the HDI (and the remaining measures of HD). For one thing, these indices do not claim to reflect the full range of HD choices; they select a few yet highly relevant choices.

Then, they do not aim at measuring the “true” development of any one country but, instead, at ranking countries according to their HD status. Lastly, in their coming out but with a number, the indices are not meant to ignore HD’s multidimensionality; they simply improve upon standard, unidimensional measures of development.

**Group Exercise No. 1 - Time: 60 minutes**

Provide the participants with the worksheets to calculate HDI. Demonstrate the manner in which HDI is calculated. Ask the participants to calculate the HDI and discuss the values. Rank the States according to the HDI. Highlight the States with the highest and the lowest values.

**Value addition of HDI**

The HDI is a measure that can capture the attention of policy makers, media and NGOs and expand the debate beyond the more usual economic statistics to focus instead on human outcomes.

The HDI can also provide a basis for questioning national policy choices.

The Philippines 1999 report on education spurred debates on educational reforms in the country’s Senate and Executive Cabinet, and the 1997 report led to Presidential directive mandating all local governments to devote at least 20 per cent of the revenue to HD priorities. The President also asked the National Statistical Coordination Board to include the Human Development Index (HDI) in the system of statistics to track variations across provinces.
Japan and South Korea have adopted the HDR’s Gender Empowerment Measure in the formulation of national legislation.

In India, human development analysis and priorities have become an integral part of national and provincial government planning. The Tenth Five Year Plan (2002-2007) & Eleventh Five year Plan (2007-12) accords high priority to human development at the provincial level.

The HDI can also highlight wide differences within countries, between provinces or states, across gender, ethnicity, and other socioeconomic groupings. Highlighting internal disparities along these lines has raised national debate in many countries.

In the Egypt HDR 1999, HDI revealed that Upper Egypt region was far behind Cairo in every dimension of human development. This led to a formal policy discussion of resource allocation between the governors of 17 provinces in the country and the entire resource allocation pattern was changed to funnel more funds to the Upper Egypt region.

In Brazil, the large State of Minas Gerais, disaggregated the human development index for all its municipalities. It then introduced the so called “Robin Hood Law” that ensures that more tax revenues are allocated to those of its municipalities that rank low on the index, as well as perform poorly on a number of other social and environmental indicators. The central government is now planning to use a modified version of the human development index, in combination with other indicators, to allocate resources to all of the country’s more than 5,000 municipalities. No longer will population size be used as the only criteria when resource allocations to municipalities are determined. Instead the budgets will depend on their level of human development.

Human Development and HDI

Ironically, the human development approach to development has fallen victim to the success of human development index. The HDI has reinforced the narrow, oversimplified interpretation of the human development concept as being only about expanding education, health and decent living standards. This had obscured the broader, more complex concept of human development as the expansion of capabilities that widen the peoples choices to lead lives that they value. Despite careful efforts to explain that the concept is broader than the measure, human development continues to be identified with the HDI- while political freedoms, participating in the life of one’s community and physical security are often overlooked. But such capabilities are as universal and fundamental as being able to read or to enjoy good health. They are valued by all people- and without them all choices are foreclosed. They are not included in the HDI because they are difficult to measure appropriately, not because they are less important to human development. Always remember that HDI is just a summary measure and does not provide a comprehensive picture of human development in any situation.
Annexure

The human development index (HDI)

The HDI is a summary measure of human development. It measures the average achievements in a country in three basic dimensions of human development:

- A long and healthy life, as measured by life expectancy at birth.
- Knowledge, as measured by the adult literacy rate (with two-thirds weight) and the combined primary, secondary and tertiary gross enrolment ratio (with one-third weight).
- A decent standard of living, as measured by GDP per capita (PPP US$).

Before the HDI itself is calculated, an index needs to be created for each of these dimensions. To calculate these dimension indices—the life expectancy, education and GDP indices—minimum and maximum values (goalposts) are chosen for each underlying indicator.

Calculating the HDI

This illustration of the calculation of the HDI uses data for South Africa.

1. Calculating the life expectancy index

The life expectancy index measures the relative achievement of a country in life expectancy at birth. For South Africa, with a life expectancy of 48.4 years in 2003, the life expectancy index is 0.391.

$$ \text{Life expectancy index} = \frac{48.4 - 25}{85 - 25} = 0.391 $$

2. Calculating the education index

The education index measures a country’s relative achievement in both adult literacy and combined primary, secondary and tertiary gross enrolment. First, an index for adult literacy and one for combined gross enrolment are calculated. Then these two indices are combined to create the education index, with two-thirds weight given to adult literacy and one-third weight to combined gross enrolment. For South Africa, with an adult literacy rate of 82.4% in 2003 and a combined gross enrolment ratio of 78% in the school year 2002/03, the education index is 0.809.

$$ \text{Adult literacy index} = \frac{82.4 - 0}{100 - 0} = 0.824 $$

$$ \text{Gross enrolment index} = \frac{78 - 0}{100 - 0} = 0.780 $$

$$ \text{Education index} = \frac{2}{3}(\text{adult literacy index}) + \frac{1}{3}(\text{gross enrolment index}) = \frac{2}{3}(0.824) + \frac{1}{3}(0.780) = 0.809 $$

3. Calculating the GDP index

The GDP index is calculated using adjusted GDP per capita (PPP US$). In the HDI income serves as a surrogate for all the dimensions of human development not reflected in a long and healthy life and in knowledge. Income is adjusted because achieving a respectable level of human development does not require unlimited income. Accordingly, the logarithm of income is used. For South Africa, with a GDP per capita of $10,346 (PPP US$) in 2003, the GDP index is 0.774.

$$ \text{GDP index} = \frac{\log(10,346) - \log(100)}{\log(40,000) - \log(100)} = 0.774 $$

4. Calculating the HDI

Once the dimension indices have been calculated, determining the HDI is straightforward. It is a simple average of the three dimension indices.

$$ \text{HDI} = \frac{1}{3}(\text{life expectancy index}) + \frac{1}{3}(\text{education index}) + \frac{1}{3}(\text{GDP index}) = \frac{1}{3}(0.391) + \frac{1}{3}(0.809) + \frac{1}{3}(0.774) = 0.658 $$

Goalposts for calculating the HDI

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life expectancy at birth (years)</td>
<td>85</td>
<td>25</td>
</tr>
<tr>
<td>Adult literacy rate (%)</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Combined gross enrolment ratio (%)</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>GDP per capita (PPP US$)</td>
<td>40,000</td>
<td>100</td>
</tr>
</tbody>
</table>
The human poverty index for developing countries (HPI-1)

While the HDI measures average achievement, the HPI-1 measures deprivations in the three basic dimensions of human development captured in the HDI:

- A long and healthy life—vulnerability to death at a relatively early age, as measured by the probability of death at birth or surviving to age 40.
- Knowledge—exclusion from the world of reading and communications, as measured by the adult illiteracy rate.
- A decent standard of living—lack of access to overall economic provisioning, as measured by the unweighted average of two indicators, the percentage of the population without sustainable access to an improved water source and the percentage of children under age 5 under weight for age.

Calculating the HPI-1 is more straightforward than calculating the HDI. The indicators used to measure the deprivations are already normalized between 0 and 100 (because they are expressed as percentages), so there is no need to create dimension indices as for the HDI.

Originally, the measure of deprivation in a decent standard of living also included an indicator of access to health services. But because reliable data on access to health services are lacking for recent years, in this year's Report deprivation in a decent standard of living is measured by two rather than three indicators—the percentage of the population without sustainable access to an improved water source and the percentage of children under age 5 under weight for age.

The human poverty index for developing countries (HPI-2)

Calculating the HPI-1

1. Measuring deprivation in a decent standard of living

An unweighted average of two indicators is used to measure deprivation in a decent standard of living.

\[
\text{Unweighted average} = \frac{1}{2} \left( \text{population without sustainable access to an improved water source} + \text{children under weight for age} \right)
\]

A sample calculation: Angola
Population without sustainable access to an improved water source = 50%
Children under weight for age = 31%

Unweighted average = \(\frac{1}{2}(50) + \frac{1}{2}(31) = 40.5\%\)

2. Calculating the HPI-1

The formula for calculating the HPI-1 is as follows:

\[
\text{HPI-1} = \left[ \frac{1}{3} \left( \frac{P_1}{100} + \frac{P_2}{100} + \frac{P_3}{100} \right) \right]^{\alpha}
\]

Where:
- \(P_1\) = Probability at birth of not surviving to age 40 (times 100)
- \(P_2\) = Adult illiteracy rate
- \(P_3\) = Unweighted average of population without sustainable access to an improved water source and children under weight for age
- \(\alpha\) = 3

A sample calculation: Angola
\(P_1 = 48.1\%\)
\(P_2 = 33.2\%\)
\(P_3 = 40.5\%\)

\[
\text{HPI-1} = \left[ \frac{1}{3} \left( \frac{48.1}{100} + \frac{33.2}{100} + \frac{40.5}{100} \right) \right]^{3} = 41.5
\]

Calculating the HPI-2

The formula for calculating the HPI-2 is as follows:

\[
\text{HPI-2} = \left[ \frac{1}{3} \left( \frac{P_1}{100} + \frac{P_2}{100} + \frac{P_3}{100} + \frac{P_4}{100} \right) \right]^{\alpha}
\]

Where:
- \(P_1\) = Probability at birth of not surviving to age 60 (times 100)
- \(P_2\) = Adults lacking functional literacy skills
- \(P_3\) = Population below income poverty line (50% of median adjusted household disposable income)
- \(P_4\) = Rate of long-term unemployment (dealing 12 months or more)
- \(\alpha\) = 3
INNOVATIONS IN MEASURING HUMAN DEVELOPMENT

Learning Outcomes

Knowledge acquired through this module will allow the participants to:

- Discuss the innovations in calculating Indices
- State the various data sources for social statistics
- Discuss the various statistical challenges pertaining to social statistics

One way the use of the human development index has been improved is through disaggregation. A country’s overall index can conceal the fact that different groups within the country have very different levels of human development. Disaggregated HDIs are arrived at by using the data for the HDI components pertaining to each of the groups into which the HDI is disaggregated, treating each group as if it were a separate country. Such groups may be defined relative to geographical or administrative regions, urban-rural residence, gender and ethnicity.

Using disaggregated HDIs at the national and sub-national levels helps highlight significant disparities and gaps: among regions, between the sexes, between urban and rural areas and among ethnic groups. The analysis made possible by the use of the disaggregated HDIs should help guide policy and action to address gaps and inequalities. For example, it can help restructure public expenditure (or aid allocations) to regions and/or groups with low HDI ranking.

Disparities may already be well known, but the HDI can reveal them even more starkly. The disaggregation prepared for the 1993 Report on the differences in living conditions in the United States among blacks, hispanics and whites spurred a great deal of policy debate. Disaggregation by social group or region can also enable local community groups to press for more resources, making the HDI a tool for participatory development. It can also be used to hold local representatives accountable.

A study of Poland (Mijakowska 1993), for example, calculates HDIs for 49 administrative units. The indices range from 0.739 to 0.916. Twenty one of them are at medium level and twenty eight of them at high HD. Weighing by population one may say that seventy four percent enjoy high HD and twenty six percent medium level of HD. Disaggregated HDIs have been used for analysis in other countries, including: Brazil, China, Colombia, Egypt, Gabon, Germany, India, Kazakhstan, Malaysia, Mexico, Nigeria, Papua New Guinea, Poland, South Africa, Trinidad and Tobago, Turkey, Ukraine and USA

India calculates its own HDI

In India there has been much discussion on the need to adapt the HDI and other composite indices to the Indian context. The Planning Commission prepared the first National Human Development Report
for the country in 2002. This Report provides an extensive data base for at least two and in some cases three points of time since 1980, covering nearly 70 distinct social indicators on various aspects of the quality of life and well being of the people. The “major objective of the Report has been to develop core set of indices that reflect, in some sense, the common concerns, social values and development priorities of all States.” (NHDR, 2002, pg 23). The following table provides list of indicators adopted by the NHDR to prepare the indices.

<table>
<thead>
<tr>
<th>UNDP Indicators</th>
<th>Attainments</th>
<th>NHDR Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life expectancy at Birth</td>
<td>Longevity</td>
<td>Life expectancy at age 1 and Infant Mortality Rate</td>
</tr>
<tr>
<td>Adult Literacy Rate with combined enrolment ratio</td>
<td>Educational Attainment</td>
<td>Literacy Rate 7+ and intensity of Formal Education</td>
</tr>
<tr>
<td>Real GDP per capita in PPP$</td>
<td>Economic Attainment</td>
<td>Per capita real consumption expenditure adjusted for inequality: and workers population ratio in case of Gender Equality Index</td>
</tr>
</tbody>
</table>


Even the State Human Development Reports (SHDRs) have experimented with the identification of indicators while preparing HD indices, although, the primary reason for this departure is non-availability of reliable and comparable district-wise data. Some of the key data constraints are:

a. Lack of consistent data across districts.

b. Lack of data for the districts during a comparable time frame.

c. Differences in data between departments, and districts and state level.

d. Non-availability of data for some for some districts (for instance if new districts are carved from existing districts)

The SHDRs have attempted to circumvent these issues by using various data sources in conjunction.

Nine SHDRs have been prepared till date - Madhya Pradesh has prepared SHDRs in 1995, 1998 and 2002, Karnataka in 1999, Sikkim in 2001, Maharashtra, Himachal Pradesh and Rajasthan in 2002, Tamil Nadu in 2003 and West Bengal in 2004. While broadly confirming to the principles for computing HDI, there are some variations in the indicators selected and the way indices for longevity and poverty has been computed in each SHDR.

For arriving at index for education attainment, all the SHDRs have used literacy rate as one of the indicators. Enrolment ratio is the second indicator used in all the SHDRs except Maharashtra 2002 where mean years of schooling is the second indicator. While Census data have been used for computing literacy rates, data from State Government Departments has been used for calculating the enrolment ratio and mean years of schooling.
For health attainment, the MP HDR 1995 and Maharashtra HDR 2002 have used infant mortality rate as the indicator. All the other SHDRs have used life expectancy as the indicator reflecting health attainment. The data sources used for estimating life expectancy and IMR are Registrar General of India (Occasional Papers) in conjunction with SRS (Sample Registration Surveys) and the Civil Registration System (CRS). The SRS data is not considered statistically significant and the CRS data is not considered to be reliable and hence the SHDRs have primarily relied on data from Registrar General of India (Census data). However, this data is available only decennially and this poses a constraint.

For preparing the income index, adjusted per capita incomes and/or poverty rates have been used by all the SHDRs.

The Karnataka HDR 1999 and Sikkim HDR 2001 have converted per capita district domestic product (DDP) to its PPP dollar equivalent by taking the ratio of per capita district GDP to that of the country in Rupees and multiplying this by per capita GDP for the country in PPP$.

Generally speaking, district income has been used as a proxy for district domestic product by using per capita incomes calculated by district shares of State NSPD by district population to arrive at comparable per capita incomes for the districts. The State NSDP is calculated for different categories in the primary, secondary and tertiary sectors. The per capita incomes thus computed have been adjusted using district-wise poverty line developed by Planning Commission (weighted for rural and urban groups) and the per capita income above poverty line adjusted accordingly. The rural and urban poverty rates have been estimated on the basis of regional data from NSSO surveys. Data sourced from the Departments of Economics and Statistics of the respective State governments, and from the Central Statistical Organisation and the Annual Survey of Industries (ASI). West Bengal has published to District Human Development Reports (DHDR).

A: Overall Purpose DHDRs

The District Human Development Reports are to be prepared to use as an important tool for integrated District Planning. Each DHDR should effectively.

- assist District Planning Committees and Government line departments in directing adequate public resources towards areas and sectors of persisting backwardness within each district
- assist the Planning Department in making realistic assessments of the quantum of physical and financial resources that need to be committed in a time-bound manner for redressing economic and social backwardness within the district
- encourage the evolution and progressive adoption of an integrated regional planning approach within the State Plan and District Plans, as a substitute for the current departmental approach

HUMAN DEVELOPMENT INDEXING FOR THE DHDRs

Indexing of human development at block and district levels during the DHDR exercise is necessary for several reasons, as described below.

- Little information currently exists at present, even within the districts, on the relative development positions of different regional sub-units within the district
- While HD indexing in the State HDR serves to identify relative disparities between districts, it is unable to fully identify current pockets of backwardness in the State, which may exist within a certain part of a district, or contiguously over adjacent regions in several districts.

- HD indexing at block level identifies the regional sub-units where HD interventions are urgently needed, as well as the type of HD interventions that need to be made.

**Modified Block-level HDI Computations in the Malda DHDR 2007-A Case**

Modified HDI computations were made in the Malda DHDR 2007, with the limited objective of making internally consistent HD comparisons between the Malda blocks. The methodology used involved the computation of

(a) a livelihood opportunities index as a substitute for the UNDP income attainment index and

(b) a health services accessibility index as a substitute for the UNDP Life expectancy index.

The health services accessibility index was defined as the unweighted average of separate sub-indexes:

(i) the proportion of the projected block population covered by rural sanitation schemes in 2005

(ii) the proportion of the projected block population fully or partially covered by safe drinking water schemes in 2005

(iii) the proportion of the target population in the age group 0-4 years covered by immunisation services under the Universal Immunisation Programme [UIP], where the immunisation target for each block was independently determined on the basis of block-wise estimates of live births rather than following the approximate ELA methodology used in reporting immunisation achievements, and

(iv) the estimated proportion of safe deliveries in the block in the year 2005

This combination of health and hygiene indicators also ensured that the health services accessibility index was sensitive to underlying factors that also determine rural morbidity and mortality, thus closely approximating the block level rankings that would have been obtained if, following the UNDP method, a zero-age life expectancy index had been computed from IMR. In Malda, the principal reason for computing immunisation coverage indirectly using block estimates of live births was because the ELA-based estimates of immunisation gave unrealistic coverage levels exceeding 100% in several blocks. IMR figures available from ICDS sources were also unrealistic since not all blocks were currently covered by ICDS services and the proportion of live births recorded under ICDS amounted to a fraction of the estimated live births reported by SHIS.

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1 Evolving Common Modalities for Preparing District Human Development Reports in West Bengal: Jeta Sankrityayana, Member/SPB & WBSSPHD-Empowered Committee & Lead Coordinator, Malda DHDR
The component **livelihood opportunities index** in the Malda DHDR was defined as the unweighted average of

(i) Census work participation rates, i.e. the ratio of the total working population to the total block population
(ii) the ratio of ‘main workers’ to ‘total workers’ in each block, reflecting relative levels of access to rural livelihoods over a sustained period, and
(iii) the ratio of ‘other workers’ to ‘main workers’ in each block, reflecting the extension of livelihood opportunities outside the agricultural sector

While no direct estimate of income attainments was used in this computation because of methodological complexities and data inadequacy, the factors underlying the expansion of livelihood opportunities would be largely identical to those that determine rural income levels. Thus block rankings based on the livelihood opportunities index could be expected to conform closely to the rankings that would have been obtained if direct estimates of block per capita income had been available. Thus, both the health services accessibility index and the livelihood opportunities index used in the surrogate HDI computations at block level would preserve the rank order and the rank differences of the constituent blocks in close conformity with orderings based on life expectancy and income attainments.

Computation of the **educational attainment index** was based on a weighted average of gross enrolment ratios [GERs] for the population in the basic school-going age group (i.e. 5-14 years) and 15+ literacy rates, thus employing the UNDP methodology as far as practicable. Forward projection of these population components from the census-year 2001 to the computation-year 2005 was accomplished through exponential projection of the growth of block populations, yielding population estimates consistent with those used administratively while estimating annual coverage targets for education, rural health and other social sector programmes in the district. Since it also stands to reason that life expectancy would be better in blocks where overall health service accessibility was better, and that overall income attainments would be higher in blocks where livelihood opportunities were wider, the simple unweighted average of these three HD dimension indexes yielded modified estimates of block level HDI that were internally consistent within the district, and could thus be used to rank the Malda blocks in terms of relative HD attainments.

No attempt was made however to calculate HDIs for the urban units located within the district, since most of the surrogate HD indicators used in the computation were relevant mainly to rural areas. Thus the modified HDI computations in the Malda DHDR pertained solely to rural units within the district. Besides these modified HDI estimates, indirect block level estimates were also generated for the Human Poverty Index [HPI] used in NHDR 2001, which - conversely to the HDI - is an index of HD deprivation rather than HD attainment. Modified HPI computations in the Malda DHDR were based on an unweighted average of figures for (i) block-wise proportion of illiterates, (ii) block-wise proportion of non-working populations, (iii) block-wise ratios of agricultural labourers to main workers, (iv) block-wise ratios of marginal workers to main workers and (v) block-wise proportions of rural families below the poverty line taken from the BPL survey.

The modified HPI indexes this computed indicated the extent of exclusion of vulnerable sections among the rural population from the HD attainments reported for the block population as a whole.
POVERTY AND HUMAN DEVELOPMENT

Time - Two hours
Interactive Session - 1 Hour
Case Discussion - 1 Hour

Note: The participants may be given the appended case “Participatory Poverty Reduction” to read before coming to the class. The session will end with the discussion of the case, on the basis of the questions suggested at the end of the case.

Learning Outcomes

Knowledge acquired through this module will allow the participants to:

- Define Poverty
- Explain how the poverty is measured
- State, process of identification of poor
- Discuss the anti-poverty policies adopted in India
- State the non-income dimensions of poverty
- Discuss strategies for poverty reduction & human development
- Discuss on Participatory Poverty Reduction

Poverty in India

On being sworn in as the first Prime Minister of independent India in 1947, Nehru called for “the ending of poverty and ignorance and disease and inequality of opportunity.” Mahatma Gandhi had always insisted that India would become truly independent only when the poorest of its people would be free from human suffering.

Every major policy and plan document has expressed such a perspective and concern. The First Five Year Plan (1951-56) stated that “the central objective of planning in India is to raise the standard of living of the people and to open them opportunities for a richer and more varied life.” The document went on to state: “It is no longer possible to think of development as a process merely of increasing the available supplies of material goods; it is necessary to ensure that simultaneously a steady advance is made towards the realisation of wider objectives such as full employment and the removal of economic inequalities.” Successive Five-Year Plans continued to emphasize poverty eradication, and the attainment of economic
equality and social justice as key objectives. The Eighth Five Year Plan (1992-97) identified human development as the ultimate goal. It aimed to create jobs, contain population, eradicate illiteracy, universalize elementary education, and provide safe drinking water and primary health care facilities to all. The Ninth Five Year Plan (1997) emphasised the importance of focusing on human development, and argued that there can be no two opinions about this being the ultimate goal of all public action. The Tenth Five Year Plan reinforces and reiterates this commitment. Eleventh Five year Plan has emphasised that the persistence of poverty on the scale at which it still exists is not acceptable. A decisive reduction in poverty and an expansion in economic opportunities for all sections of the population should therefore be a element of the vision for the Eleventh Plan. Rapid growth of the economy is an essential requirement to achieve this outcome since it is an instrument for achieving a steady increase in employment and incomes for large numbers of our people.

**Poverty policies**

Despite the strong political consensus on ending poverty, poverty policy in India has been overwhelmingly concerned with income poverty. The focus on income poverty began early in the 1960s when a Working Group of eminent economists was set up by Government of India to assess the extent of poverty in the country. This Group used a nationally desirable minimum level of consumption expenditure to define India’s poverty line and based it on a standard balanced diet prescribed by the Nutrition Advisory Committee. Based on such a measure, the Group found that “half the population lives in abject poverty.” The Report discussed the consequences as well. “Such widespread poverty is a challenge which no society in modern times can afford to ignore for long. It must be eradicated on humanitarian grounds and as a condition for orderly progress.” It also warned that no programme or policy that “fails to alleviate the conditions of the poor appreciably can hope for the necessary measure of public cooperation and political support in a mature democracy.”

The Report of the Working Group set the trend for defining and measuring income poverty. Subsequent studies on poverty in India continued to use either income or consumption as the basis for defining and measuring poverty. The attention of policy makers thus shifted to a narrow conception of poverty as income deprivation. The focus of poverty policy was on providing an assured minimum income to every citizen of the country. To this day, India's income poverty line is the monetary equivalent of a minimum daily calorie intake – 2400 calories per person in rural areas and 2100 calories per person in urban areas.

Assessing levels of income poverty over time and across States is not an easy task. Differences in methodologies and assumptions can lead to quite different estimates. Until recently, for example, there were two sets of poverty line estimates for India using the same criteria of minimum calorie requirements. In 1993-94, for instance, according to the Planning Commission, only 19% of India’s population was below the poverty line. This was the “official” estimate. Estimates based on consumer expenditure surveys carried out regularly by the National Sample Survey (NSS) Organization however placed the proportion of India’s population below the poverty line at 36%. In February 1997, Government of India accepted the recommendations of the Expert Group on Estimation of Proportion and Number of Poor (1993) which rejected the adjustments made by the Planning Commission to arrive at estimates of poverty. As a result, the official estimate of India’s population below the poverty line was 35.97% in 1993-94. According to the latest estimates (1999-2000) the population living below poverty line declined to 26.10% (260.2 million)
Despite the decline in proportions, the number of income poor has been increasing due to the growth in population. Between 1951-94, their numbers doubled - from 170 million in 1951 to an estimated 340 million in 1994 as population increased nearly threefold. There were nearly 25 million more rural poor in 1994 than there were in 1986-87. Similarly, though the proportion of urban poor went down from 34% in 1986-87 to 31% in 1994, the number of urban poor during this period remained almost the same, around 60 million. According to the latest estimates (2004-05) there are about 80.8 million poor people in urban India (25.7%) and 220.92 million (28.3%) poor people in rural areas.

Many would credit the reductions in income poverty to economic growth. Between 1950-75, when income poverty was fluctuating, growth averaged 3.6%. Over the next 10 years, when the reduction in income poverty was more pronounced, growth rose to 4%, and during 1986-91, it averaged 6%. A related factor is agricultural growth. India from the mid-1970s to the mid-1980s enjoyed a higher and more stable trend rate of agricultural growth. On the other hand, when the index of agricultural production for all commodities fell by 2.5% between 1990-91 and 1991-92, rural poverty went up in the country.

Although economic growth has the potential to reduce income poverty equating growth with income poverty reduction is too simplistic. The association between economic growth and poverty reduction is weak. In the latter half of the 1980s, for example, despite rapid economic growth, income poverty did not decline much. Similarly, all States recorded significant declines in income poverty from the mid 1970s to the end 1980s even though the green revolution was limited in geographical coverage; and most States did not record any significant increase in agricultural value-added per head of rural population.

Discussion Prompt - 30 minutes

Ask the participants to discuss the possible reasons why growth in national incomes has not translated into poverty reduction in their own States. Reasons should be categorized appropriately (eg. faulty premises, structural limitations, capacity limitations, system failures and State-specific features).

Use the points in the below to consolidate the discussion.

- Several factors mediate the conversion of economic growth into income poverty reduction. Kerala, for instance, ensured maximum reductions in income poverty despite slow economic growth through political activism and a rapid expansion of equal opportunities. Improvements in infrastructure and access to assets also play an important role in income poverty reduction.
- Growth is important but the conversion of higher incomes into income poverty reduction is contingent upon several factors: effective public policy interventions, the redistribution of assets, the equitable expansion of physical and social infrastructure, an even and rapid spread of health, education and employment opportunities, and the assurance of people’s participation.

Public expenditures have played an important role in India’s income poverty reduction. The period from the mid 1970s to the end of the 1980s when income poverty showed a marked reduction was also a
decade when public expenditures rose phenomenally. During this period, the Government introduced several new poverty alleviation programmes. There was an increased political commitment to poverty eradication which was backed by an increased allocation of resources and by a set of new pro-poor policies. Nationalized commercial banks were required to assign 40% of their lending to priority sectors - small farmers, small businesses, and artisans. New employment-creation and asset generation programmes for income poverty reduction were introduced. As a result, rural non-agricultural employment increased substantially, and real wages went up sharply. But most important, between 1976 and 1990, real per capita development expenditure increased at an annual rate of 6% per annum compared with only a 3% growth in real GDP per capita. In fact, the steep rise in government spending contributed to the fiscal crisis that necessitated economic reforms in 1991. On the other hand, after economic reforms were introduced, real government expenditure per capita fell 15% during 1990-93, but increased again by 6% in 1993-94. Income poverty too worsened in the initial years of the reforms, but since 1994, showed improvement.

Government expenditures appear to have a much more direct and distinct impact on poverty than income growth. Practically all States that have succeeded in reducing poverty have made sizable investments in poverty alleviation programmes. The size of government spending matters, but so does the efficiency of such spending. Leakage, corruption and inefficiency in management are frequently reported. Nevertheless, even with a poor record in programme implementation, states that have invested heavily in poverty alleviation programmes seem to do distinctly better in income poverty reduction. This indicates the enormous potential that exists for accelerating income poverty reductions with improvements in the efficiency of spending. Improving the design, administration and management of poverty alleviation programmes are urgently required for a more rapid reduction in income poverty.

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### Number and Percentage of Population Below Poverty Line by States - 2004-2005
(Based on URP-Consumption)

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155
Non-income dimensions of poverty

The overwhelming attention paid to measuring and monitoring income poverty has resulted in a gross neglect of other serious forms of human deprivation such as child labour, illiteracy and environmental degradation. Many other forms of deprivations are silent and invisible. These include for instance issues of women’s health, domestic violence and child malnutrition. These deprivations are not related to income or income poverty levels in any predictable manner. Haryana is one of the richest and fastest growing states in terms of per capita income. The per capita income of Haryana is more than double than the per capita income of Manipur in 1997-98 at 1980-81 prices. Yet infant mortality in Haryana is 69 per 1,000 live births (1991) is more twice than in income-poorer Manipur. And women in Haryana suffer systematic deprivation that gives them one of the lowest female-to-male ratios in the country - 861 per 1000 males (2001).

Income levels often fail to capture deprivations along other dimensions of human life. Rural Andhra Pradesh and rural Madhya Pradesh, for example, suffer from similar levels of educational deprivation - an illiteracy rate of 64% - but the proportion of income poor is 29% in Andhra Pradesh and it is 45% in Madhya Pradesh. Again, the extent of urban illiteracy is the same in Punjab and Orissa (28%), and yet the proportion of urban income poor is 11% in Punjab, and in Orissa, it is 41%. Similarly, Kerala, Tamil Nadu and Andhra Pradesh which report the lowest levels of child malnutrition do so despite having relatively low levels of per capita incomes. Madhya Pradesh and Maharashtra report the same levels of child malnutrition even though Maharashtra's per capita income is more than double that of Madhya Pradesh’s. Gujarat, among the high-income states, reports the highest levels of child malnutrition.

Levels of affluence or the lack of incomes also fail to measure the richness - or poverty of human lives. Urban poverty rates, for instance, have been consistently lower than rural poverty rates nationwide and across all states. Also, urban income levels are typically higher than rural incomes. Yet visitors to India’s major cities will observe that traffic congestion has increased dramatically and so has air pollution. Respiratory problems have gone up and there is a severe shortage of water and electricity. The poor, especially those living in urban slums, estimated to be around 21.1% of urban population, experience the decay even more: clogged drainage pipes, stagnant water, filthy public latrines, uncleared garbage piles, and an increasingly unhealthy environment around them. Most significantly, infant mortality in urban areas has remained stagnant in recent years for the country as a whole, and has gone up in several states. The declining trends in urban income poverty do not capture such dangerously deteriorating living conditions.

While income is important, people often value other things in life much more than income. Even to the very poor, self-respect and a good reputation mean a lot. They often articulate their immediate needs as a good education for their children, access to good health care facilities, and a safe environment. They detest exploitation and discrimination. To most people, to be treated with dignity and respect matter much more than incomes.
Strategies for poverty eradication

Given India’s mixed record of the past, what are the chances that the political intent will translate into public action? Clearly, there is a long way to go in ending human deprivations. Access to quality health care, basic education and other essential services has to improve dramatically. Caste, class and gender barriers have to be addressed. Physical provisioning has to be expanded considerably. There is scope for optimism because

- The Eleventh Plan and official policies for poverty eradication reflect human development priorities.
- Economic conditions are favourable.
  - Democratic participation is opening up. This is not just through local governments but through people’s organizations, and in particular women’s groups that are frequently organized around credit, economic activities and social empowerment.

At the same time, there are some causes for concern.

- The focus on reducing fiscal deficits is forcing major cuts in social sector spending.
- The pressure to pursue state minimalism is leading to a virtual abdication of state responsibilities.
- The pressure to privatize is beginning to affect people’s access to basic health and education.

Case Discussion: Time-30 minutes

At this stage the case may be taken up for discussion. The Instructor may raise the following questions, as given at the end of the case, and encourage participant to respond to them.

i. How can empowered poor women help in fighting against poverty?

ii. How can we make the project of women-oriented participatory approach viable to deal with the problem of poverty?

iii. What are the conditions of success of such an approach?

iv. Where is such experiment being replicated?

Individual Exercise No. 1 – Time: 30 minutes

Ask each participant to give five concrete suggestions on “What needs to be done differently to ensure that India progresses on the scale of human development? Ensure that suggestions given below are discussed.
Some suggestions to strengthen HD

- Maintain a balance between economic growth and an expansion of social opportunities. Give high priority to basic education, preventive and promotive health care, assuring basic economic security and livelihoods.
- Correct imbalances and inequalities between men and women, between rural and urban areas, between socially disadvantaged communities and the rest of society.
- Invest adequate resources in social sectors. Additional resources could be mobilized by improving tax-GDP ratio and ensuring a growth rate of 6-8% per annum; by eliminating subsidies to the rich; by cutting losses of public enterprises; and by reducing defense spending.
  - Set the priorities right for public spending. Expenditures must be utilized for improving the quality and efficacy of services, for correcting imbalances in public expenditures, for plugging leaks and reducing wastage, and for ensuring greater efficiency in spending.
- The State needs to play a more proactive role in expanding social opportunities. The State has shown dynamism in reducing controls, liberalizing the economy, and opening up the economy. The 73rd Constitutional amendment to ensure women’s participation in local governments displays an extremely progressive and proactive face. On the other hand, efforts at abolishing child labour, preventing child prostitution, and until recently, addressing the problem of AIDS have been far less successful. On many of these matters, sustained advocacy, open debates, concerted pressure and public action are urgently needed to provoke a positive response from the state.
- Create and expand opportunities for women to participate more fully in economic and political decision-making. The human development experience from Kerala and Manipur suggest that the well-being of society improves when women enjoy greater economic, social and political freedoms.

Ensure that economic growth is participatory. It must be planned and managed locally by people whose lives it affects. Communities must participate actively to shape programmes, ensure that opportunities are expanded, and that the benefits are shared equitably. For this, structures of local self-governance must be strengthened; and people’s participation has to become a norm of public life.
APPENDIX: CASE

Participatory Poverty Reduction

From Malappuram to Kudumbashree, Kerala

Introduction

Anti-poverty programmes undertaken by the Government of Kerala have led to a reduction in poverty levels, but persistent backwardness in certain locations and among particular groups of people worries the policy-makers. It is widely recognized that a top-down approach to poverty reduction that depended on isolated schemes delivered separately to individual families or groups of families had failed to yield desired results.

Kerala started a pilot project of participatory poverty alleviation initially in Allapuzha municipal area with the support of the UNICEF as part of the centrally-sponsored Urban Basic Services Programme (UBSP). Based on the lessons from the pilot phase, the model was extended to all the municipalities in 1995, which included the rural areas of Malappuram district covering 96 panchayats. Thus, the Cudumbashree (prosperity for the family) project evolved after intense experimentation in diverse conditions into the participatory strategy for taking power to the people and especially the poorest and weakest women.

Background

Kudumbashree is a women-oriented community-based poverty reduction programme being implemented in Kerala by the state government, with the active support of the Government of India, National Bank for Agricultural and Rural Development (NABARD), and UNICEF. Two bank-linked self-employment programmes of the Swarna Jayanti Shahari Rozgar Yojana (SJSRY), namely Development of Women and Children in Urban Areas (DWCUA) and Urban Self Employment Programme (USEP), provide Kudumbashree with nominal financial resources to encourage beneficiaries of the project to set up micro-enterprises. More than 10,600 USEP micro-enterprises and 685 DWCUA micro-enterprises have already been generated in Kerala and the Kudumbashree project is gaining international recognition as well. It has been awarded the coveted Commonwealth Association for Public Administration and Management (CAPAM) gold medal for the year 2000, for best practice in public management. The community marketing network concept of Kudumbashree is fast developing as a field-level reality. Kudumbashree is an outstanding example of a successful government organised non-governmental organisation (GONGO).

Objectives

The mission statement of the Kudumbashree project is ‘to eradicate absolute poverty in 10 years through concerted community action under the leadership of local governments, by facilitating organisation for the poor for combining self-help with demand-led convergence of available services and resources to tackle the multiple dimensions and manifestations of poverty holistically’.

The specific objectives of the project are as follows:

- Facilitating self-determination of the poor families through a transparent risk index composed of socially accepted indicators of poverty through a participatory survey.
Empowering the women among the poor to improve their individual and collective capabilities by organising them into neighbourhood groups (NHGs) at the local level, area development societies (ADSs) at the ward level and community development societies (CDSs) at the local government level.

Encouraging thrift and investment through credit by developing CDSs to work as informal banks for the poor.

Improving incomes of the poor through upgradation of vocational and managerial skills and creation of opportunities for self-employment and wage employment.

Ensuring better health and nutrition for all poor families.

Ensuring access to basic amenities like safe drinking water, sanitary latrines, improved shelter and healthy living environment.

Ensuring zero dropouts in schools for all children belonging to the poor families.

Promoting functional literacy among the poor and supporting continuing education.

Enabling the poor to participate in the decentralization process through the CDSs as sub-systems of the local government.

Helping the poor fight social evils like alcoholism, smoking and drug abuse, dowry, discrimination based on gender, religion, caste, etc.

Providing a mechanism for convergence of all resources and services meant for alleviation of poverty in the state.

Collaborating with government and non-government institutions and agencies in all activities related to improving the quality of life of the poor.

**Salient Features**

**The Malappuram model**

Malappuram has been identified as one of the most backward districts in India. The district has the highest fertility and infant mortality rates in Kerala. The Union Ministry of Health has enlisted Malappuram as one of the 90 problem districts in India. The percentage share of families below poverty line in the district was as high as 45 per cent.

A fact sheet of the district is given in Table

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Profile of Malappuram District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area</td>
<td>3548 sq. km</td>
</tr>
<tr>
<td>Population: 2001 Census</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>17,59,479</td>
</tr>
<tr>
<td>Female</td>
<td>18,70,161</td>
</tr>
<tr>
<td>Total</td>
<td>36,29,640</td>
</tr>
<tr>
<td>Socially disadvantaged groups*</td>
<td>2,55,731</td>
</tr>
</tbody>
</table>

**Final Proof**
<table>
<thead>
<tr>
<th>Social indicators vis-à-vis state average</th>
<th>District Average</th>
<th>State Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decadal growth rate (1991-2001)</td>
<td>17.22%</td>
<td>9.42%</td>
</tr>
<tr>
<td>Infant mortality rate*</td>
<td>22</td>
<td>13</td>
</tr>
<tr>
<td>Women Literacy</td>
<td>85.96%</td>
<td>87.86%</td>
</tr>
<tr>
<td>Average family size*</td>
<td>6.49</td>
<td>5.3</td>
</tr>
<tr>
<td>Families below poverty line*</td>
<td>45%</td>
<td>26%</td>
</tr>
</tbody>
</table>

Note: * Data pertains to 1991 Census

Identification of the poor

The methodology used to identify the poor suffered from two basic deficiencies. First, since it is based on income, there was substantial under-reporting and the officials conducting the survey had to exercise a great deal of discretion in the absence of verifiable data. Second, the identification was used only to provide direct assistance under a single programme, the Integrated Rural Development Programme (IRDP). It was felt that a layman-friendly index based on a non-monetary set of indicators to determine poverty would be more reliable and acceptable. Based on a system of trial and error in Alappuzha municipality of Kerala, a nine-point risk index was developed consisting of the following elements:

- Poor quality of house i.e. kutchha house.
- Lack of access to safe drinking water.
- Lack of access to sanitary latrines.
- Number of illiterate adults in the family.
- Single income households.
- Number of individuals getting barely two meals a day or less.
- Number of children below the age of five in the family.
- Number of cases of alcoholism or drug addiction in the family.
- Scheduled caste or scheduled tribe family (i.e., belonging to socially disadvantaged groups).

The households with four out of nine factors were classified as poor. Thus a community-based transparent identification system of the poor was attempted. This index represented significant innovation and a fundamental departure from existing norms.

Organisation of the poor

Hitherto, poverty alleviation programmes in India, by design or default, have focused on equipping the male head of a household with skill or wage employment that the family could rise above the poverty line. Programmes have been delivered without any lateral linkages or follow up appraisals. No attempt has been made to view the target groups as cohesive units and provide a suitable basket of services and schemes. A conscious attempt was made to get over these problems in the Malappuram project.
At the local level, the identified families were organised into NHGs of 20 to 30 families. Each family in the NHG was represented by a woman. These NHGs of women were networked into ADSs at the level of the Ward or electoral constituency. These ADSs were then federated into a CDS at the village panchayat or municipality level. There were also higher levels of networking at the level of the intermediate local government tier, viz., the block panchayat at the district level.

Organization Set-up

- **NHG:** Each NHG prepares a development micro-plan based on the needs of the members as identified through surveys and discussions. The basic building block of the community based organization is the NHG. This grassroots level body democratically elects five volunteers from its members who function as barefoot experts performing the following functions:
  - The President presides over the weekly meetings and imparts necessary leadership and guidance to the group members.
  - The Secretary records the details of the proceedings of the meeting and is responsible for necessary follow-up including motivation and team building.
  - The Community Health Volunteer looks after various health related issues of the group members, particularly among children, women and the aged, and is responsible for the convergence of various programmes undertaken by the health and social welfare departments.
  - The Volunteer for Income Generation Activities looks after the collection, consolidation and maintenance of books, accounts and registers in connection with thrift mobilization. Necessary training is imparted by NABARD towards capacity building of the volunteers.
  - The Volunteer for Physical Amenities acts as a catalyst for local development by identifying gaps in the availability of critical physical amenities; trying to integrate the resources of various government programmes; and liaising with local government organs for the follow up of programmes.

- **ADS:** This is formed at the ward level of the village panchayat or municipality by networking NHGs, normally 8 to 10 in number. The ADS functions through three distinct bodies:
  - The General Body consists of all presidents and secretaries of federated NHGs along with the representatives of resource persons selected from that area.
  - The Governing Body is constituted by electing a president, secretary and five-member committee from the members in the general body. It oversees the functioning of the general body.
  - A Monitoring and Advisory Committee is formed under the chairmanship of the elected member of the village panchayat or municipality representing that ward. Since the ward is the basic unit for laying down priorities for local development, the ADS acts as a lobby of the poor in the preparation of development plans by local governments. The ADS puts together the micro-plans of the NHGs into what is called a mini plan.
• CDS: CDS is a registered non-government organisation (NGO) formed at the village panchayat or municipality and comprising of a federation of ADSs. Like the ADS, it has also three sub-systems:

• The General Body consists of all ADS chairpersons and ADS governing body members along with representatives of resource persons, officers of the local government who are involved in implementing various poverty alleviation and women empowerment programmes.

• The Governing Body consists of a president, member secretary and five selected committee members. The President is the elected representative whereas the member secretary is the local officer in charge of anti-poverty programmes. Other government officials and representatives of resources persons are nominated to the Governing Body.

• Monitoring and Advisory Committee: The municipal chairperson/president of the panchayat is the chairman of the Monitoring and Advisory Committee which is convened by the municipal secretary/panchayat secretary.

The CDS is co-terminous with the village panchayat or municipality and prepares development plans at the local government level by consolidating the plans prepared by the ADSs. The CDS is recognised as an agency to which local governments can entrust the execution of small public works through the process of community contracting. The participation and representation of the women of the community, who constitute the core of the NHG model, imparts a gender dimension to the programme and ensures that the voice of the disadvantaged is heeded. There are CDSs at the block level and district level, which serve to coordinate as well as provide feedback and take up higher order development activities. Regular weekly meetings are held and the discussions and decisions are recorded. These meetings serve as forum for the dissemination of information, development of consensus on collective requirements, and the discussion of possibilities of cohesive action.

**Key features**

• The programme covers every family below the poverty line.

• Each poor family is represented by a woman, a paradigm shift from the a priori male-centric model of poverty alleviation programmes. Women have imparted a new dimension to the project in terms of feedback on poverty indicators, sensitivity to problems of the poor, commitment to poverty alleviation, and special attention to gender concerns.

• The whole system is democratic and encourages full participation through periodic discussions and rotation of volunteers every two years.

• The volunteers have ample opportunity to hone their leadership qualities through regular capacity building initiatives.
• The democratic hierarchy of the organization facilitates interventions at different stages of the local development planning process.

• The representative character of the organization enables it to be a powerful interest group representing 30-35 per cent of the population.

• Since decisions are taken based on analysis of the field situation and through the medium of regular discussions, the plans represent the felt needs and priorities of the community.

• The hierarchical organization with the higher levels 'nesting the representatives of the lower level' affords good channels for quick and effective communication.

**Strategies**

**Informal bank for the poor**

A major function of the organisation is to act as an informal bank for the poor (Box 1). Women pool their savings at the weekly NHG meetings. The ADS is authorized to open accounts in banks to deposit the savings. So far in Malappuram Rs. 2.67 core has been collected out of which Rs. .06 crore has been circulated as loans among the members mainly for immediate needs like medical treatment, educational expenses and repayment of old debts. About 70 per cent of the disbursements are used for consumption purposes or to ward off indebtedness. The remaining disbursements are for economic development activities either for the strengthening

**Box 1**

**The poor women's bank**

In 1995, a thrift and credit society was started as small savings scheme for poor women with an objective to encourage the poor to save and widen their resource base. The women contribute small sums at group meetings. This money is entrusted to the Commanding Officer who then deposits it in the nearest bank. Each member is given an individual passbook, which ensures transparency in the maintenance of accounts. Members are given loans from the thrift society to meet their immediate needs like medical treatment, purchase of school books and uniforms for children etc. Each request for a plan is discussed in the NHG meeting.

The thrift and credit society has made astounding progress. In a span of one-and-a-half years, the women could mobilise Rs. one crore as thrift savings. These societies have been acclaimed as the largest informal bank in Asia, in terms of participation and savings mobilised. As on 31 October, 1998, the thrift savings were Rs.1.50 crore. of existing activities or for taking up new activities. Since the whole process, and in particular the financial component of the project is transparent, there has been 100 per cent repayment of loans. As on 31 March 2002, the number of NHGs was 4,645, with a total thrift of Rs. 5,36,30,006 and total thrift loan of Rs. 5,51,38,883.

164
To ensure accountability, a simple community financial management system has been designed and is operated by the secretary of the ADS. This ensures regular monitoring of loan repayment as well as close scrutiny in the accounting and audit of balance sheets.

The main objective is to go beyond mobilising thrift from members towards attracting credit from commercial banks. It is expected that with the strengthening of the system the banks would lend nine times the savings without any guarantee. NABARD has already provided credit to 808 NHGs. The loan repayment is 99.98 per cent as against 51 percent for the traditional anti-poverty programmes.

Role of government

The government acts as a proactive facilitator of the programme. At the district level, there is a full-time coordinator for the programme, appointed by the government, who acts as a catalyst without infringing upon the autonomy of the CDS system.

A massive capacity building exercise has been undertaken within the CDS matrix. Experts as well as key resource persons selected from amongst the community imparted the training. There has been a significant effect of the training programme:

- In 1994, nearly 13,000 volunteers were trained in identification of risk families.
- Between the period 1994-98, 1,06,000 community volunteers were trained on concept, strategy and operations of the project.
- During 1995-98, about 4,645 volunteers were trained in community health management.
- 2,000 training courses were conducted on community finance management by the CDS in 1995-96 and by NABARD in 1995-97.
- About 20,000 volunteers were trained in preparation of development plans in 1995 -96, in implementation in 1996-97 and monitoring in 1996-97.
- In 1998, about 3,000 volunteers were trained in Participatory Learning and Action (PLA) techniques.
- In 1995 and 1996, 850 volunteers were trained in micro-enterprise development.
- In 1995, 99 awareness camps against alcoholism were conducted.
- During 1995-97, 1700 training camps on immunization were held.

Achievements

The CDS system has translated into several impressive achievements that have been delineated below:

Final Proof
Environmental sanitation and drinking water

The programme has facilitated the construction and capacity building of several sanitation and drinking water initiatives. It has provided:

- 5,600 sanitary latrines with the support of the government and local bodies.
- 20 bore wells under the Drought Relief Scheme of the government.
- 10 open wells under the Drought Relief Scheme of the government.
- 53 toilets in schools.
- Rural Sanitary Marts in 14 blocks.

It has also introduced rainwater harvesting techniques in the district and trained and equipped 200 women masons.

Education

The programme has also led to the following tangible benefits in the field of education:

- Additional facilities created in pre-primary and primary schools.
- Formation of Mother Teacher Associations (MTAs) in primary schools.
- Reduction in drop-out rate. (According to volunteers/activists actively involved in the CDS’ programme, the drop out rates which were 35 per cent in 1991 declined to 1-12 per cent. Further, the teachers involved in the programme state that there has been an increase in the number of girl students in 5th to 8th standards, from 10-15 per cent to 30-35 per cent, respectively.)
- Remedial education for under-performing students from poor families. A DPEP has been extended to marginalised groups.

Community Health

Improvements in the collective health of the community have been a palpable plus point of the CDS system. This has been due to the following achievements in the sphere of community health:

- Improved use of medical facilities.
- Convergence of health programmes.
- Universal coverage in immunization against polio.
- Reduced incidence of diseases of poverty such as cholera, typhoid, malaria and diarrhoea.
- Better outreach of reproductive and child health (RCH) programmes.
- Participatory implementation of AIDS control programme.
- Opening of Rural Health Depots for First Aid and Oral Rehydration Salt.
Development of micro-enterprises

The CDS system has enabled the development of several sustainable micro-enterprises: I:

- 12.3 22 micro-enterprises set up and assisted through revolving funds.
- Direct marketing groups selling consumer goods set up.
- Festival markets organised through group action.
- Micro-enterprise consultants trained to form a support network.
- Variety of initiatives ranging from solid waste management to computer centres implemented (Box 2).

Box 2

Micro-enterprise development by kudumbashree

Kudumbashree promotes micro-enterprises for women below poverty line. These enterprises include Catering, soap making, goat rearing, rice cultivation, copra production, spice/coffee packaging and managing computer booths. Till 2002, 35,196 women have been engaged in micro-enterprise and 26,505 units have been created. The total investment in micro-enterprises in Kerala, as on 30 April 2002, has been Rs. 64 crore.

Lessons learned

The first five years of the Malappuram experience yielded several lessons that are of relevance to the alleviation of poverty:

- Community-based involvement of the poor through simple transparent criteria has resulted in better identification of the poor. Since the criteria are in tune with the perceptions of the public, there is greater objectivity and reduced patronage in classifying the poor families for various benefits.
- The organisation of the poor has provided a powerful social safety net against vulnerability. The poor now have a well-defined role in public life, particularly in the development process right from the planning stage. The internal dynamics of the system often helps it to develop organically with cohesion and purpose. The highly democratic and participatory structure of the system has helped it to be recognised as a true representative of the poor. There has been a gradual but perceptible improvement in the confidence levels of the poor and they have begun articulating their demands. From expressing their ‘voice’, they have to be enabled to use their power of ‘choice’. Their ‘freedoms’ have been enlarged and ‘capabilities’ enhanced in small but significant degrees.
- The Malappuram experience represents the conscious empowerment of the poor through a gender-sensitive process. It has imparted a new dimension to the role of the state. By actively promoting awareness amongst the public, capacity building of the community and the design of self-management systems, it has proved that the state can playa crucial role in the empowerment of poor communities through consistent policy efforts. The community
development system has been authorised to select and identify the beneficiaries of various developmental programmes of the poor sponsored by the state as well as local governments. Also, it is encouraged to take up implementation of public works through community contract.

- By focusing on the social dynamics of the organisation and by encouraging thrift, the culture of Self-help (Box 3) has been inculcated. This is in sharp contrast to the earlier practice of providing subsidies, doles and ‘freebees’ to the poor to enable them to rise above the poverty line.
- The quality of interventions for reducing poverty as enunciated in the mission statement has improved through the participatory planning undertaken by the system.

<table>
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<th>Box 3</th>
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**From dependence to self-help**

With the formation of Thrift Societies, there has been a visible change in the attitude of women. In the initial stages of the programme, projects like the Community Based Nutrition Programme and the Poverty Alleviation Programme (PAP) were considered as just additional channels for providing latrines. However, the real concept of the programmes is gradually catching on. With the formation of self-help groups, women have come to realize that the fundamental cause of their poverty is very low levels of income and unless they are able to learn some extra money, their condition will not improve. As a result of this, their demands for starting income generating activities increased exponentially.

In 1998, UNICEF provided Rs. 7 lakh for initiating activities that contributed to supplementing family incomes in all the panchayats in the district. These funds have been used by women to purchase goats and cows, to initiate mushroom cultivation and even to set up tea shops and garment manufacturing units. NABARD is also supporting the programme under its self-help group scheme and two banks viz., Canara Bank and South Malabar Gramin Bank, have sanctioned Rs. 18.5 lakh to the district community development system for lending to the women without any collateral security.

Rapid collection of essential data, interactive prioritisation of developmental needs and collective identification of economic development opportunities have contributed to the preparation and implementation of improved poverty reduction schemes at the local level.

- The transparent functioning of the system has promoted trust amongst the poor and has enabled them to identify persons most needy of assistance. This has contributed towards preventing ungainly jockeying for benefits and crude dependence-inducing patronage systems among the population.
- The experiment has contributed to bringing about more responsive governance through:
  - Improved outreach of developmental software.
  - Better access and utilisation as well as reduction of costs of public services.
  - Improved accountability, transparency and targeting in developmental systems as well as greater convergence of Governmental resources.
  - More efficient management of public assets such as water supply systems.
In short, the Malappuram experience shows that empowerment of the poor is an unfolding process with clearly discernible phases having sequential progression. Based on the evidence, the stages in the empowerment process are depicted in Fig. 1.

The above sequence holds true in a majority of cases though it is possible to leave out or combine some of the stages. For such a scheme to be a success there is undoubtedly a need for cooperation and coordination by the community at every stage, as well as facilitation and commitment from the state government.

**Fig. 1**

**Stages in the empowerment process**

1. Better awareness of government programmes & services for the poor
2. Improved access and utilisation of such facilities and programmes
3. Generation of savings and lending them for consumption purposes and emergencies
4. Lending for improving existing self-employment ventures
5. Micro-level planning for minimum basic needs
6. Micro-level planning for social infrastructure
7. Micro-level planning for economic development through income-generation activities
8. Seeking and availing of bank credit for individual and group micro-enterprises
9. Demand for improvement in public services especially those relating to primary health, and reproductive and child health, pre-primary and school education, welfare entitlements related to food security and social security
10. Readiness to manage public assets like water supply systems
11. Public action against social evils like alcoholism, which mainly affects women
12. Public action to facilitate the creation of a political space to influence policy-making
Replicability

The Malappuram example has shown that empowered poor women are important catalysts in the fight against poverty. This example has highlighted the need for co-ordinated efforts and convergence of resources to achieve basic human needs such as drinking water, primary health care and education. It has shown that the strengthening and expansion of women oriented participatory approach is a viable alternative for monitoring poverty alleviation programmes. The CDS system has a critical role in the conceptualization and implementation of anti-poverty programmes, in the identification and selection of beneficiaries of such programmes and in performing social audit functions, as a watchdog of the public.

Malappuram CDS is the largest NGO of women in the whole of Asia. It has internationalised a dynamic system whereby 1.66 lakh women network through about 5,000 NHGs every week to facilitate overall individual and community development. The twin concepts of convergent community action and self-help have ushered in a new paradigm in community development.

The Malappuram experience has revealed that novel methods for tackling various dimensions of poverty, both causative and symptomatic. The Government of Kerala has decided to replicate this all over the state through the Kudumbashree programme. For this purpose, a State Poverty Eradication Mission has been created specially maintained by officers selected from various development departments on the basis of proven capability and commitment, at the state and district levels.

Questions for Discussion:

1. How can empowered poor women help in fighting against poverty?
2. How can we make the project of women-oriented participatory approach viable to deal with the problem of poverty?
3. What are the conditions of success of such an approach?
4. Where is such experiment being replicated?
FINANCING FOR HUMAN DEVELOPMENT

Time - One hour thirty minutes
Interactive Session - 70 Minutes
Exercises- 20 minutes

Learning Outcomes

Knowledge acquired through this module will allow the participants to

- Define Social Sectors
- Discuss the fiscal constraints for financing for development in an Indian context.
- Define the ratios to analyse the public spending
- Discuss the various sources for mobilizing resources

Several commentators have pointed out that it is the lack of political commitment, not lack of financial resources, that is the real cause of human neglect. This is the main conclusion of Human Development Report 1991—the second in a series of annual reports on the subject. The Report points to an enormous potential for restructuring of both national budgets and international aid allocations in favour of human development. But the plea for greater allocative efficiency and more effective spending does not mean indifference to the need for economic growth, or for increased resource mobilisation. The Report’s position is that a more efficient and effective public sector will help strengthen the private role in human development. And the best argument for additional resources is that the existing funds are well spent.

To analyse how public spending on human development can be designed and monitored, four ratios have been suggested in the Human Development Report 1991.

a. The public expenditure ratio - the percentage of national income that goes into public expenditure.

b. The social allocation ratio - the percentage of public expenditure earmarked for social services.

c. The social priority ratio - the percentage of social expenditure devoted to human priority concerns.

d. The human expenditure ratio - the percentage of national income devoted to human priority concerns.

The human expenditure ratio is the product of the first three ratios. It is a powerful operational tool that allows policy-makers who want to restructure their budgets to see existing imbalances and the available options.

If public expenditure is already high (as in many developing countries), but the social allocation ratio is low the budget will need to be reassessed to see which areas of expenditure could be reduced. Military spending, debt servicing and loss-making public enterprises are often likely candidates.
If the first two ratios are high, but the ultimate human development impact, as reflected in human development indicators, is low the social priority ratio must be increased. For the poorest countries, this is likely to involve seeking a better balance between expensive curative hospitals and preventive primary health care, between universities and primary schools and between focusing greater attention on the cities and on the rural areas, where most poor people live.

The human expenditure ratio should increasingly become one of the principal guides to public spending policy. When resources are tight, greater attention must be paid to allocation priorities and efficiency in spending. It is wrong, however, to confuse a plea for greater efficiency with indifference to the mobilisation of additional resources. The best argument for mobilising more resources is spending existing resources well.

The United Nations Millennium Declaration Goals (MDGs) in September 2000 is a set of International Development Goals (IDGs) to be attained by 2015. The Millennium Declaration heralded a new international response to tackling development issues and also acknowledged the importance of developing a strategy for raising resources to fund the attainment of development goals.

**MILLENNIUM DEVELOPMENT GOALS TO BE ACHIEVED BY 2015**

1. **Eradicate extreme poverty and hunger**
   - Halve the proportion of people living on less than $1 a day.
   - Halve the proportion of people suffering from hunger.

2. **Achieve universal primary education**
   - Ensure that children everywhere – boys and girls alike – complete a full course of primary education.

3. **Promote gender equality and empower women**
   - Eliminate gender disparities in primary and secondary education preferably by 2005, and in all levels.

4. **Reduce child mortality**
   - Reduce infant and under-five mortality rates by two-thirds.

5. **Improve maternal health**
   - Reduce maternal mortality ratios by three-quarters.

6. **Combat HIV/AIDS, malaria and other diseases.**
   - Halt and begin to reverse the spread of HIV/AIDS
   - Halt and begin to reverse the incidence of malaria and other major diseases.

7. **Ensure environmental sustainability**
   - Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources.
   - Halve the proportion of people without sustainable safe drinking water.
   - Achieve by 2020, a significant improvement in the lives of at least 100 million slum dwellers.

8. **Develop a global partnership for development.**
Taking the cue from the MDGs or goals for development and poverty eradication set at the UN General Assembly in 2000, to which India is a signatory, the Tenth Plan lists monitorable targets that include the reduction of poverty ratio, providing gainful and high-quality employment, all children in school, reduction in gender gaps in literacy and wage rates, reduction in the decadal rate of population growth, increase in literacy rates, reduction of Infant mortality rate (IMR) and Maternal mortality ratio (MMR), increase in forest and tree cover, all villages to have sustained access to potable drinking water and cleaning of all major polluted rivers.

In July 1996, the Conference of State Chief Ministers made a commitment to achieve the following seven human development objectives by the end of the century:

a. Safe drinking water for all
b. Access to primary health care for all
c. Universal primary education
d. Public housing assistance for the homeless
e. Extension of mid-day meal scheme
f. Road connections to all villages and habitations
g. Food security through the public distribution system for families below the poverty line.

The successful achievement of these objectives is dependent on the availability of human and financial resources as well as improved efficiency of existing resource use. The other factors that affect implementation and outcome of programmes are population changes, community awareness and community involvement in development programmes, the pattern of economic development, the efficiency of the administrative infrastructure, the status of women and other social and cultural factors, which differ from State to State.

**VISION FOR THE ELEVENTH PLAN (2007-12)**

The central vision of the Eleventh Plan is to build on our strengths to trigger a development process which ensures broad based improvement in the quality of life of the people, especially the poor, SCs/STs, OBCs, minorities and women.... However the target is not just faster growth but also inclusive growth, i.e. a growth process which yields broad based benefits and ensures equality of opportunity for all. This broad vision of the Eleventh Plan includes several inter related components: rapid growth that reduces poverty and creates employment opportunities, access to essential services in health and education especially for the poor, equality of opportunity, empowerment through education and skill development, employment opportunities underpinned by the National Rural Employment Guarantee, environmental sustainability, recognition of women’s agency and good governance.

While acknowledging the resource constraints at the Union and State levels, the Eleventh Plan document recognizes the complementary role that the private sector and civil society can play with the public sector in the provision of infrastructure and social services, as well as in developing financial innovations to widen access to financing for all segments of society. The NHDR 2001, does stress on the fact that mere allocation of sufficient public resources for furthering human development in not enough. It is equally important to use them efficiently and effectively.
State governments are basically responsible for developing the social sectors. Health care, urban development, housing and water supply are under the exclusive jurisdiction of the State governments, while education, family welfare, social security and labour welfare are under the concurrent jurisdiction of the Centre and States. The Central government through its central sector schemes provides grants to the States to cover programmes like those for poverty alleviation, women and child development, income generating schemes, and programmes for developing tribal population. This also helps the government to provide leadership in terms of focusing on critical issues in the development process. Overall, expenditure on education forms the largest component of the social sector, followed by public health and water supply. Labour, social security and welfare is another important crucial expenditure head. Financing of the social sector has primarily occurred on the basis of domestic resources.

Social sector expenditure as a percentage of GDP has not increased if the Centre and the States are taken together. The Union budget for 2003-04 reveals that the year 2002-03 will end with Central Government expenditure on Plan programmes in the social sector about 5 per cent less than the budgeted Rs. 26,823 crores. The deficit cuts across all social sectors. Spending, according to the revised estimates, has been less than budgeted in the areas of elementary and secondary education, health, drinking water and sanitation and tribal welfare. Unfortunately, elementary education is where the gap between budgeted and actual spending is the largest in the current financial year. The decline in the share of developmental expenditure is also significant. Plan expenditure as a ratio of aggregate disbursements declined from over 30% in 1991 to 26-27% in mid 1990s and even lower levels of 22-24% in the last three years of the 1990s. The implications of this fiscal stress for social services expenditure have been adverse.

Pronab Sen point out “Although, India has large investible resources and reasonably good performance on poverty reduction and social development there are still considerable challenges especially in the context of regional and interstate disparities and disparities between social groups and classes.”

A high public expenditure ratio is neither a virtue nor a necessity. Public policy and public spending must facilitate, encourage and complement private spending to ensure that human development needs are met. If a government is to allow for sufficient spending in priority areas, a public expenditure of 20-25% is desirable. A study done in 1988 found that private spending often exceeds public spending. Today, the ratio between private and public spending on human development is in most countries approximately 1:1. It is most important for developing countries to increase the overall level of human development spending. Needless to say, the creation of an enabling policy framework for private sector development would not only help unleash the capacity of people at large, as well as that of domestic entrepreneurs. It would also be critical to attracting foreign investors and the employment and income they could help generate, and thus open up new avenues for human development.

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2 ibid.
3 HDRC Discussion Series Paper “Financing For Development”

Final Proof
MODULE 7

GENDER AND HUMAN DEVELOPMENT

Time: Two hours

Learning Outcomes

Knowledge acquired through this module will allow the participants to:

- Discuss how the process of human development is incomplete without gender equality.
- State various forms of gender inequality
- Discuss the status of women in India and various plans and policies designed for achieving gender equality
- Explain the concept of Gender Budgeting

Until recently, it was assumed that development was gender-neutral – that both men and women could benefit equally from development, and that the benefits of development interventions spread evenly across society. This has now been shown to be a myth – the historical legacy of gender inequality in all societies across the world implies that there is no “level playing field”.

The UNDP 1995 Global Human Development Report attempted to capture gender inequalities through the Gender Related Development Index (GDI), which is essentially the HDI adjusted for gender inequalities, with a GDI of 1 reflecting an absolute equality in the respective attainments of men and women. This Report also introduced the Gender Empowerment Measure (GEM) – which is a measure of the extent to which men and women are able to actively participate in economic and political decision-making and in the professional/work arena. The GEM reflects the extent to which men and women can achieve and use their inherent capabilities to take advantage of development opportunities.

Human Development Report 1995 has highlighted that one of the defining movements of the 20th century has been the relentless struggle for gender equality, led mostly by women, but supported by growing numbers of men. When this struggle finally succeeds as it must it will mark a great milestone in human progress. And along the way it will change most of today’s premises for social, economic and political life. At the heart of this concept are three essential components:

- Equality of opportunity for all people in society.
- Sustainability of such opportunities from one generation to the next.
- Empowerment of people so that they participate in-and benefit from-development processes. Equal enjoyment of human rights by women and men is a universally accepted principle, reaffirmed by the Vienna declaration, adopted by 171 states at the World Conference on Human Rights in June 1993. It has many dimensions:
- Equal access to basic social services, including education and health.
- Equal opportunities for participation in political and economic decision-making.
• Equal reward for equal work.
• Equal protection under the law.
• Elimination of discrimination by gender and violence against women.
• Equal rights of citizens in all areas of life, both public—such as the workplace—and private—such as the home. The recognition of equal rights for women along with men, and the determination to combat discrimination on the basis of gender, are achievements equal in importance to the abolition of slavery, the elimination of colonialism and the establishment of equal rights for racial and ethnic minorities.

Human development, if not engendered, is endangered. That is the simple but far-reaching message of the HDR 1995.

Human development is a process of enlarging the choices for all people, not just for one part of society. Such a process becomes unjust and discriminatory if most women are excluded from its benefits. And the continuing exclusion of women from many economic and political opportunities is a continuing indictment of modern progress. For too long, it was assumed that development was a process that lifts all boats, that its benefits trickled down to all income classes—and that it was gender-neutral in its impact. Experience teaches otherwise. Wide income disparities and gender gaps stare us in the face in all societies. Moving towards gender equality is not a technocratic goal—it is a political process. It requires a new way of thinking—in which the stereotyping of women and men gives way to a new philosophy that regards all people, irrespective of gender, as essential agents of change.

The human development paradigm, which puts people at the centre of its concerns, must thus be fully engendered. Any such attempt would embrace at least the following three principles:

• Equality of rights between women and men must be enshrined as a fundamental principle. Legal, economic, political or cultural barriers that prevent the exercise of equal rights should be identified and removed through comprehensive policy reforms and strong affirmative action.

• Women must be regarded as agents and beneficiaries of change. Investing in women’s capabilities and empowering them to exercise their choices is not only valuable in itself but is also the surest way to contribute to economic growth and overall development.

• The engendered development model, though aiming to widen choices for both women and men, should not predetermine how different cultures and different societies exercise these choices. What is important is that equal opportunities to make a choice exist for both women and men.

In no society do women enjoy the same opportunities as men

An innovation of the Human Development Report, 1995, the gender-related development index (GDI), reflects gender disparities in basic human capabilities—and ranks 130 countries on a global scale. The four top countries are in the Nordic belt—Sweden, Finland, Norway and Denmark, in that order. This is hardly surprising. These countries, much concerned with ending the relative deprivation of women, have
adopted gender equality and women’s empowerment as conscious national policies. In these countries, adult literacy rates are similar for women and men, and combined enrolment is higher for females. Life expectancy is, on average, about seven years higher for women (compared with an estimated global biological edge of five years). And women’s earned income is around three-fourths of men’s income.

**Dimensions of Gender inequality of selected countries is tabulated below:**

<table>
<thead>
<tr>
<th>Countries</th>
<th>Gender Development Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>0.859</td>
</tr>
<tr>
<td>Brazil</td>
<td>0.789</td>
</tr>
<tr>
<td>Bangaldesh</td>
<td>0.524</td>
</tr>
<tr>
<td>Burundi</td>
<td>0.38</td>
</tr>
<tr>
<td>Cameroon</td>
<td>0.497</td>
</tr>
<tr>
<td>Chile</td>
<td>0.85</td>
</tr>
<tr>
<td>Colombia</td>
<td>0.787</td>
</tr>
<tr>
<td>China</td>
<td>0.765</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>0.831</td>
</tr>
<tr>
<td>Ghana</td>
<td>0.528</td>
</tr>
<tr>
<td>United States</td>
<td>0.946</td>
</tr>
<tr>
<td>India</td>
<td>0.591</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.704</td>
</tr>
<tr>
<td>Malaysia</td>
<td>0.795</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>0.749</td>
</tr>
<tr>
<td>Thailand</td>
<td>0.781</td>
</tr>
<tr>
<td>Uganda</td>
<td>0.498</td>
</tr>
<tr>
<td>Venezuela</td>
<td>0.78</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>0.483</td>
</tr>
</tbody>
</table>

Source: Human Development Report 2006

**Removing gender inequality has nothing to do with national income**

Income is not the decisive factor. Several of the world’s poor nations have been able to raise female literacy rates. With limited resources but a strong political commitment, China, Sri Lanka and Zimbabwe raised adult women’s literacy to 70% or more. By contrast, several richer countries lag behind. The decision to invest in the education and health of people, irrespective of gender, seems to cut across income levels, political ideologies, cultures and stages of development.
In many cases, a strong political commitment has driven efforts to improve women’s human development despite a shortage of resources. Countries applying socialist models, for example, used social and political mobilization to achieve rapid-and equal-progress in education and health for men and women and to engineer social transformations to expand opportunities for women. Comparing GDI ranks with the income levels of countries confirms that removing gender inequalities is not dependent on having a high income. China is ten GDI ranks above Saudi Arabia, even though its real per capita income is a fifth as high. Thailand outranks Spain in the GDI, even though Thailand’s real per capita income is less than half of Spain’s. Poland’s GDI rank is 50 places higher than Syria’s, even though the two countries have about the same real income. So, gender equality can be pursued -and it has been-at all levels of income. What it requires is a firm political commitment, not enormous financial wealth.

Every country has made progress in developing women’s capabilities, but women and men still live in an unequal world.

Gender gaps in education and health have narrowed rapidly in the past two decades, although the pace of this progress has been uneven between regions and countries.

**Literacy female as percentage of Male is tabulated below:**

<table>
<thead>
<tr>
<th>Countries</th>
<th>Female Literacy Rate as % of Male (2004)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>100</td>
</tr>
<tr>
<td>Brazil</td>
<td>100</td>
</tr>
<tr>
<td>Burundi</td>
<td>78</td>
</tr>
<tr>
<td>Cameroon</td>
<td>78</td>
</tr>
<tr>
<td>Chile</td>
<td>100</td>
</tr>
<tr>
<td>China</td>
<td>91</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>100</td>
</tr>
<tr>
<td>Ghana</td>
<td>75</td>
</tr>
<tr>
<td>Guatemala</td>
<td>84</td>
</tr>
<tr>
<td>India</td>
<td>65</td>
</tr>
<tr>
<td>Indonesia</td>
<td>92</td>
</tr>
<tr>
<td>Malaysia</td>
<td>93</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>97</td>
</tr>
<tr>
<td>Thailand</td>
<td>95</td>
</tr>
<tr>
<td>Uganda</td>
<td>75</td>
</tr>
<tr>
<td>Venezuela</td>
<td>99</td>
</tr>
</tbody>
</table>

Source: Human Development Report 2006
While doors to education and health opportunities have opened rapidly for women, the doors to economic and political opportunities are barely ajar.

Major forces in closing the gender gaps over the past two decades are higher female enrolments at all levels in developing countries-and rising women’s paid employment in industrial countries. But the opportunities open to women have remained limited. The Human Development Report 1995 marshals detailed evidence of the unequal access to opportunities. Some telling examples:

- Poverty has a woman’s face—of 1.3 billion people in poverty, 70% are women. The increasing poverty among women has been linked to their unequal situation in the labour market, their treatment under social welfare systems and their status and power in the family.
- Women’s labour force participation has risen insignificantly from 36% in 1970 to 40% in 1990. Compare that with a two-thirds increase in female adult literacy and school enrolment.

Women spent most of the time in non-market activity but men are actively involved in market activity.

<table>
<thead>
<tr>
<th>Countries</th>
<th>Time Allocation</th>
<th></th>
<th>Time spent by men</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time spent by women</td>
<td>Market activities</td>
<td>Non market activities</td>
<td>Market activities</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>35</td>
<td>65</td>
<td>70</td>
<td>30</td>
</tr>
<tr>
<td>Colombia (Urban)</td>
<td>24</td>
<td>76</td>
<td>77</td>
<td>23</td>
</tr>
<tr>
<td>India</td>
<td>35</td>
<td>65</td>
<td>92</td>
<td>8</td>
</tr>
<tr>
<td>Indonesia (Urban)</td>
<td>35</td>
<td>65</td>
<td>86</td>
<td>14</td>
</tr>
<tr>
<td>Kenya (Urban)</td>
<td>41</td>
<td>59</td>
<td>79</td>
<td>21</td>
</tr>
<tr>
<td>Kenya (Rural)</td>
<td>42</td>
<td>58</td>
<td>76</td>
<td>24</td>
</tr>
<tr>
<td>South Africa</td>
<td>35</td>
<td>65</td>
<td>70</td>
<td>30</td>
</tr>
</tbody>
</table>

Source: Human Development Report 2006

- Women receive a disproportionately small share of credit from formal banking institutions. They are assumed to have no collateral to offer—despite working much harder than men. For example, in Latin America and the Caribbean, women constitute only 7-11% of the beneficiaries of credit programmes.

- Women normally receive a much lower average wage than men, because they hold low-paying jobs or work in the informal sector and because they are sometimes paid less than men for equal work. The average female wage is only three-fourths of the male wage in the non-agricultural sector in 55 countries that have comparable data.

- All regions record a higher rate of unemployment among women than men.

- In developing countries, women still constitute less than a seventh of administrators and managers.

- Women still occupy only 10% of the parliamentary seats and only 6% of the cabinet positions.
In 55 countries, there are either no women in parliament or fewer than 5%. These countries range from very poor (Bhutan and Ethiopia) to reasonably affluent (Greece, Kuwait, the Republic of Korea and Singapore). Despite considerable progress in developing women’s capabilities, their participation in economic and political decision making remains very limited. The gender empowerment measure (GEM), looks at women’s representation in parliaments, women’s share of positions classified as managerial and professional, women’s participation in the active labour force and their share of national income.

**A major index of neglect is that many of women's economic contributions are grossly undervalued or not valued at all.**

The undervaluation of women is reflected in the undervaluation of their work and in the absence of recognition of the contribution that they make. The debate therefore must cover equality of rewards as well as equality of opportunity. Data on time use by women and men for selected countries tell a dramatic story:

- Women work longer hours than men in nearly every country. Of the total burden of work, women carry on average 53% in developing countries and 51% in industrial countries.

<table>
<thead>
<tr>
<th>Total work time (minutes per day)</th>
<th>Female work time (% of male)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>Men</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>545</td>
</tr>
<tr>
<td>Colombia (Urban)</td>
<td>399</td>
</tr>
<tr>
<td>India</td>
<td>457</td>
</tr>
<tr>
<td>Indonesia</td>
<td>398</td>
</tr>
<tr>
<td>Kenya (Urban)</td>
<td>590</td>
</tr>
<tr>
<td>Kenya (Rural)</td>
<td>676</td>
</tr>
<tr>
<td>South Africa</td>
<td>332</td>
</tr>
</tbody>
</table>

Source: Human Development Report 2006

- On average, about half of this total work time of both men and women is spent in economic activities in the market or in the subsistence sector. The other half is normally devoted to unpaid household or community activities.

- Of men’s total work time in industrial countries, roughly two-thirds is spent in paid activities and one-third in unpaid activities. For women, the situation is the reverse. In developing countries, more than three-quarters of men’s work is in market activities. So, men receive the lion’s share of income and recognition for their economic contribution while most of women’s work remains unpaid, unrecognized and undervalued. With no economic value given to these activities, the contribution of women is seriously underestimated, and there is no adequate reward or
recognition for the burden of work that women carry. In fact, the failure to value most of their work reduces women to virtual non-entities in most economic transactions—such as property ownership or offering collateral for bank loans. Since status in contemporary society is so often equated with income-earning power, women suffer a major undervaluation of their economic status. But they carry a higher share of the total work burden. And men’s work in the market-place is often the result of “joint production”, not a solo effort, since much of it might not be possible if women did not stay at home looking after the children and household.

If women’s unpaid work were properly valued, it is quite possible that women would emerge in most societies as the major breadwinners—or at least equal breadwinners—since they put in longer hours of work than men. The monetization of the non-market work of women is more than a question of justice. It concerns the economic status of women in society. If more human activities were seen as market transactions at the prevailing wages, they would yield gigantically large monetary valuations.

Another major element of discrimination is the unacceptably low status of women in society, with continuing legal discrimination and violence against women

The starkest reflection of the low status accorded to women is the discrimination against them in the law. In many countries, women still are not treated as equal to men—whether in property rights, rights of inheritance, laws related to marriage and divorce, or the rights to acquire nationality, manage property or seek employment.

• The devaluation begins even before life begins. In some countries, testing is used to determine the sex of the fetus which may be aborted if it is female.

• It scars early life. A third of the women in Barbados, Canada, the Netherlands, New Zealand, Norway and the United States report sexual abuse during childhood or adolescence. An estimated one million children, mostly girls in Asia, are forced into prostitution annually. And an estimated 100 million girls suffer genital mutilation.

• It becomes a part of marriage. Studies in Chile, Mexico, Papua New Guinea and the Republic of Korea indicate that two-thirds or more of married women have experienced domestic violence. In Germany, it is estimated that up to four million women a year suffer from domestic violence.

• It is sometimes manifested in rape. Studies from Canada, New Zealand, the United Kingdom and the United States suggest that about one woman in six is raped in her lifetime.

• It may end in murder. More than half of all murders of women in Bangladesh, Brazil, Kenya, Papua New Guinea and Thailand are committed by present or former partners.

• Or in suicide. Cross-cultural evidence from South America, several Melanesian islands and the United States established marital violence as a leading cause of female suicide. Although violence stalks women’s lives, laws can do little unless present cultural and social values change.
The revolution towards gender equality must be propelled by a concrete strategy for accelerating progress

Engendering the development paradigm involves radical change in the long-standing premises for social, economic and political life.

1. National and international efforts must be mobilized to win legal equality within a defined period-say, the next ten years. To achieve this objective, the international community will need to move on several fronts:

2. Many economic and institutional arrangements may need revamping to extend more choices to women and men in the workplace. For example: ENCOURAGING MEN TO PARTICIPATE IN FAMILY CARE.

3. Key programmes should embrace universal female education, improved reproductive health and more credit for women. These programmes can make a decisive difference in enabling women to gain more equitable access to economic and political opportunities.

Analysis of experience shows that in three critical areas-access to education, reproductive health and credit resources women face barriers that can be overcome only through determined policy action.

4. National and international efforts should target programmes that enable people, particularly women, to gain greater access to economic and political opportunities. REPRODUCTIVE HEALTH CARE, CREDIT FOR POOR PEOPLE, SUSTAINABLE LIVELIHOOD FOR ALL, Remunerative employment opportunities are the key to the attack on poverty. But not all of them need to be in the formal, organized sectors of the economy. What is essential is to encourage self-employment schemes, microenterprises and opportunities for the poor to enter the market TARGETED PROGRAMMES FOR POVERTY REDUCTION, CAPACITY BUILDING AND EMPOWERMENT.

From the perspective of human development, gender inequality has adverse impacts at two levels. Longevity and education are important human capabilities and critical constituents of well-being. Reduced achievements for women in these areas is intrinsically problematic.

Gender inequalities can also have instrumental impacts through creating constraints in the achievement of a number of development goals. For example, studies have shown that gender inequality in education and access to resources may hamper the process of reduction of child mortality and lowering of fertility, which in turn impacts the expansion of education for the next generation. Gender inequality also has a negative impact on economic growth. There is now overwhelming evidence that countries that adopt specific measures to protect women’s rights and increase their access to resources and schooling have less corruption and achieve faster economic growth than countries that do not.

Dimensions of Gender Inequality

Inequality between women and men can take very many different forms, and incorporates a large range of interlinked problems. Amartya Sen (2001)* provides examples of different kinds of inequalities.
a. **Mortality inequality:** In some regions in the world, inequality between women and men directly involves matters of life and death, and takes the brutal form of unusually high mortality rates of women and a consequent preponderance of men in the total population, as opposed to the preponderance of women found in societies with little or no gender bias in health care and nutrition. Mortality inequality has been observed extensively in North Africa and in Asia, including China and South Asia.

b. **Natality inequality:** Given that many male-dominated societies have a preference for boys over girls, gender inequality can manifest itself in the form of the parents' wanting the new born to be a boy rather than a girl. There was a time when this could be no more than a wish (a daydream or a nightmare, depending on one's perspective), but with the availability of modern techniques to determine the gender of the fetus, sex-selective abortion has become common in many countries. It is particularly prevalent in East Asia, in China and South Korea in particular, but also in Singapore and Taiwan, and has emerged as a statistically significant phenomenon in India and South Asia as well.

c. **Basic facility inequality:** Even when demographic characteristics do not show much or any anti-female bias, there are other ways in which women can have less than a square deal. There are many countries in Asia and Africa, and also in Latin America, where girls have far less opportunity of schooling than boys do. There are other deficiencies in basic facilities available to women, varying from encouragement to cultivate one's natural talents to fair participation in rewarding social functions of the community.

d. **Special opportunity inequality:** Even when there is relatively little difference in basic facilities including schooling, the opportunities of higher education may be far fewer for young women than for young men. Indeed, gender bias in higher education and professional training can be observed even in some of the richest countries in the world, in Europe and North America.

e. **Professional inequality:** In terms of employment as well as promotion in work and occupation, women often face greater handicap than men. A country like Japan may be quite egalitarian in matters of demography or basic facilities, and even, to a great extent, in higher education, and yet progress to elevated levels of employment and occupation seems to be much more problematic for women than for men.

f. **Ownership inequality:** In many societies the ownership of property can also be very unequal. Even basic assets such as homes and land may be very asymmetrically shared. The absence of claims to property cannot only reduce the voice of women, but also make it harder for women to enter and flourish in commercial, economic and even some social activities. This type of inequality has existed in most parts of the world, though there are also local variations. For example, even though traditional property rights have favoured men in the bulk of India, in what is now the state of Kerala, there has been, for a long time, matrilineal inheritance was followed until 1974 by the Nair community.

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*The Many Faces of Gender Inequality, The Frontline, India, November 9, 2001.*
Household inequality: Basic inequalities in gender relations within the family or the household, which can take many different forms. Even in cases in which there are no overt signs of anti-female bias like differential survival, son-preference or biases in access to education, family arrangements can be quite unequal in terms of sharing the burden of housework and child care. For example, it is quite common in many societies including India to take it for granted that while men will naturally work outside the home, women could do it if and only if they could combine it with various inescapable and unequally shared household duties. This is sometimes called “division of labour,” though women could be forgiven for seeing it as “accumulation of labour.” The reach of this inequality includes not only unequal relations within the family, but also derivative inequalities in employment and recognition in the outside world. Also, the established fixity of this type of “division” or “accumulation” of labour can also have far-reaching effects on the knowledge and understanding of different types of work in professional circles.

Gender equality and women’s status in India

According to the latest global HDR 2005, Indian ranks 98 among 140 countries with a GDI value of 0.586. GEM is not computed for India because of unavailability of data.

This may seem surprising, because India is among the few developing countries where gender equality and improvement in the status of women are specifically stated to be central goals of development and social policy. This commitment is buttressed by explicit Constitutional mandates that reflect a substantive understanding of the various dimensions of freedom and equality for women. The Constitution also clarifies that affirmative action programmes for women are not incompatible with the principle of non-discrimination on the grounds of sex. Figure shows the male-female gap in literacy in India since 1901. It is revealed that male-female gap in literacy has increased from 9.2 percent in 1901 to 26.6 percent in 1981 with a small decline in 1971. During this period both male and female literacy has increased but the growth rate for female literacy was lower. Since 1980s specified thrust has been put on Gender issues globally. As a result in India women’s issues have got importance.
CONSTITUTIONAL GUARANTEES

- Equality before the law. **Article 14**
- No discrimination by the State on the grounds only of religion, race, caste, sex, place of birth or any of these. **Article 15(1)**
- Special provisions to be made by the State in favour of women and children. **Article 15(3)**
- Equality of opportunity for all citizens in matters relating to employment or appointment to any office under the State. **Article 16**
- State policy to be directed to securing for men and women equally, the right to an adequate means of livelihood. **Article 39(a)**
- Equal pay for equal work for both men and women. **Article 39(d)**
- Provisions to be made by the State for securing just and humane conditions of work and for maternity relief. **Article 42**
- To promote harmony and to renounce practices derogatory to the dignity of women. **Article 51(A)(e)**

Despite these enabling factors, gender inequality continues to be one of the defining features of Indian society. Women lag behind men in most of the critical indicators of human development, and poverty in India increasingly wears a female face. Women’s subordinate status is reflected in almost every sphere.

a. Life expectancy is a basic measure traditionally used as a proxy for capturing the social position of women. Although the life expectancy of women has improved at a faster rate than for men being 61.4 years for women and 60.1 years for men in 1999. This is still below the international norm which is

b. Sex ratio (number of females per number of males in the population) is also a good indicator of the social position of women. Although the aggregate sex ratio for all ages improved between 1991 and 2001, it was lower in 2001 than the level in 1981, indicating a long-term trend. Census 2001 has also underlined the fact that the decline in sex ratio in the 0-6 age cohort has been continuous and substantial. Amongst the most probable causes for this disturbing trend are sex-selective abortions of female foetuses, combined with systematic neglect of infant girls, leading to lower rates of survival. There are substantial variations in sex ratios across States, but it is significant that these appear to be unrelated to per capita incomes or levels of development.

c. Death rates during the first five years of life also show very significant gender differentials. In 1998-99, the child mortality rate for rural boys was 27.9 per thousand, while that for rural girls was one-and-a-half times higher at 41.7\(^1\).

\(^{1}\) Data from the Registrar-General of India, Sample Registration Surveys.
d. The average Indian woman bears her first child before she is 22 years old, and has little control over her own fertility and health. Maternal mortality for the country as a whole was estimated at 580 per 100,000 live births in the early 1990s. A significant number of maternal deaths are caused by anaemia. The majority of women in India go through life in a condition of nutritional stress, eating last and least.

e. Gender disparities in nutrition remain significant and have probably even widened over time. Estimates by the National Nutrition Monitoring Bureau indicate that the proportion of men defined as “Chronically Energy Deficient” in terms of Body Mass Index declined to nearly half (from 55.6 per cent in 1975-79 to 28.6 per cent) in 1995-96, while the decline among women was significantly less (from 51.8 per cent to 36.2 per cent) over the same period. While the All-India average intake of calories is substantially below the recommended dietary allowance for both men and women, the largest deficits are in the case of pregnant and lactating mothers.

f. Gender disparity in nutrition is marked among children. Numerous micro studies have indicated that deep-rooted gender bias can be expressed even by mothers, through differential patterns of breast-feeding and food distribution, reflected in differential rates of malnutrition for girls and boys.

g. India is still home to the largest illiterate female population in the world. Only 50 per cent of Indian women are literate, compared to 65.5 per cent men. There is substantial evidence to show that even when girls are formally enrolled in schools, they often do not attend regularly for a variety of reasons, including their involvement in unpaid work in the home. Similarly, dropout rates tend to be much higher for girls than for boys.

h. Most women workers in India are engaged in agriculture, where livelihoods have become insecure and wages are low, with a significant gender wage gap. Women’s work is “invisible” and unrecognized socially and in public policy. The definition of economic activity used by both the Census and the National Sample Survey is quite restrictive. Even though Census 2001 recorded women’s involvement in some household enterprises such as farm activities, small-scale artisan production or transacted service provision, it still does not include the full spectrum of economic activities defined in the UN System of National Accounts. The National System of Accounts therefore excludes a significant amount of unpaid or non-marketed labour within the household, including the processing of primary produce for own consumption, basic domestic handicraft production, services such as cleaning, childcare and care of the sick and elderly. This contributes to an underestimation of economic activity within the household and work participation rates, especially of women.

i. Women are under-represented in governance and decision-making positions. At present, less than 8% of Parliamentary seats, less than 6% Cabinet positions, less than 4% of seats in High Courts and the Supreme Court, are occupied by women. Less than 3% of administrators and managers are women.

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Final Proof
j. Women are legally discriminated against in land and property rights. Most women do not own any property in their own names, and do not get a share of parental property. While women are guaranteed equality under the Constitution, legal protection has little effect in the face of prevailing patriarchal traditions. Women lack power to decide whom they will marry, and are often married off as children. They are also unable to exercise their reproductive rights. Legal loopholes are used to deny women their right to inherit family property.

k. Women face violence inside and outside the family throughout their lives. Police records show that a woman is molested in the country every 26 minutes. A rape occurs every 34 minutes. Every 42 minutes, an incident of sexual harassment takes place. Every 43 minutes, a woman is kidnapped. Every 93 minutes, a woman is killed.

Inter State Gender disparities

The First National Human Development Report of India prepared by the Planning Commission presented the Gender Disparity Index for two time points - 1981 and 1991. In the 80s, GDI was highest for Kerala, followed by Manipur, Meghalaya, Himachal Pradesh and Nagaland. The situation changed in the 90s, with Himachal Pradesh at one end of the spectrum with a GDI value of 0.858, and Bihar at the other end with a GDI value of 0.469.

EXERCISE IN STATE-WISE GROUPS - TIME 20 MINUTES

Analyzing the causes and consequences of gender inequality

Provide participants with copies of the State-wise figures and tables from the National Human Development Report, 2002.

Step One. Ask the group to identify the main manifestations of gender inequality in their own State, based on the data and on their own experience of the situation at the local level, and classify them on the basis of Sen’s framework. Assign 20 minutes for this task.

Step Two. Ask the group to identify the major causes behind each of the manifestations of gender inequality identified by them, and to trace the interlinkages between them. Assign 30 minutes for the task. Ask groups to present their findings in a diagrammatic form on flip-charts.

The Report concludes that in general, women were better off in Southern India than in the Indo-Gangetic plain, comprising mainly the States of Bihar and UP. States that have done well on improving their female literacy levels were also the ones that have substantially improved gender equality.

The table given below provides data for some human development indicators. The differences in the quality of life enjoyed by women in different States is striking.

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187

Final Proof
## National Plans and Policies

Awareness of the above situation, and a determination to address it through focused policy measures, are features of each of the National Five-Year Plans.

The current Eleventh Plan document identifies malnutrition, poor health, lack of education, overwork, violence and systemic powerlessness as markers of the life-long discrimination faced by women in India. The Eleventh Plan represents a distinct advance from earlier plans, in terms of articulating a strong and time-bound platform for action on gender equality. Key strategies are:

- **Creating an enabling environment through positive economic and social policies**, for the development of women and the realisation of their full potential;
- **Enabling the de jure and de facto enjoyment of all human rights and fundamental freedoms** by women on par with men in the spheres of political, economic, social, cultural and civil rights;
- **Ensuring equal access** of women to public services, public office and decision-making in the social, political and economic spheres;
- **Strengthening legal systems** aimed at the elimination of all forms of discrimination against women;
• **Changing societal attitudes** and community practices through the active participation and involvement of both men and women;

• **Mainstreaming a gender perspective** into the development process by setting up Gender Resource Centres in State Governments.

• **Eliminating discrimination and all forms of violence** against women and the girl child;

• **Building and strengthening partnerships with civil society**, particularly women’s organisations, corporate and private sector agencies.

India has also ratified various international conventions and human rights instruments committing to secure equal rights of women. Key among them is the ratification of the Convention on Elimination of All Forms of Discrimination Against Women (CEDAW) in 1993. The Mexico Plan of Action (1975), the Nairobi Forward Looking Strategies (1985), the Beijing Declaration as well as the Platform for Action (1995) and the Outcome Document adopted by the UNGA Session on Gender Equality and Development & Peace for the 21st century, titled “Further actions and initiatives to implement the Beijing Declaration and the Platform for Action” have been unreservedly endorsed by India for appropriate follow up.

The National Policy for the Empowerment of Women adopts a sector-specific three-fold strategy of social empowerment, economic empowerment and gender justice for the empowerment of women.

a. **Social Empowerment** - creating an enabling environment through various affirmative developmental policies and programmes for development of women besides providing them easy and equal access to all the basic minimum services so as to enable them to realize their full potential.

b. **Economic Empowerment** - ensuring provision of training, employment and income-generation activities with both ‘forward’ and ‘backward’ linkages with the ultimate objective of making all potential women economically independent and self-reliant; and

c. **Gender Justice** - elimination of all forms of gender discrimination to ensure both de jure and de facto rights and fundamental freedoms for women on par with men in all spheres.

**Gender Budgeting**

Gender Budgeting, as we all know, does not imply a separate budget for women per se, and in fact, it is an exercise of analyzing the general budget from a gender perspective. Thus, the major objective of gender budgeting is to improve the analysis of the budget in terms of more effective targeting of public expenditure and revenue towards women and to offset any undesirable gender specific consequences of previous budgetary measures. It is therefore an enabling process to allow women to enjoy their rightful share in the socio-economic development of the country. A meaningful gender budgeting exercise can happen only when our official accounting methods explicitly capture the gender dimensions of our expenditure patterns. In other words, gender budgets must be rooted in hard data generated by the delivery system and not on any a-priori assumptions or rules of thumb. The alternative is to make specific allocations for women-

**Final Proof**
centric programmes and assume that all other expenditures would go primarily to men. This approach no doubt has validity as a transitional arrangement, and our women’s component plan rightly falls into this category. Over the longer term, however, this approach runs counter to our basic objective of mainstreaming the gender dimension in government programmes. Mainstreaming the gender dimension in Government programmes does not mean making them less gender sensitive. This underlines the importance of collection and flow of the necessary data related to the impact of the programme. Such information will have two significant benefits. First, it would enable us to formulate budgets on the basis of realistic ratios regarding the flow of benefits. Second, and more importantly, it would enable us to assess the degree of gender bias in each programme. This would be extremely valuable for redesigning the guidelines and modalities of implementation to make our various programmes more gender sensitive.

Gender Budget Initiatives or Gender Responsive Budgets are tools and processes designed to facilitate a gender analysis in the formulation of government budgets and the allocation of resources. Gender budgets are not separate budgets for women, or for men. They are attempts to break down or disaggregate the government’s mainstream budget according to its impacts on women and men. The way in which national budgets are usually formulated ignores the different, socially determined roles, responsibilities and capabilities of men and women. Budgets formed from a gender-neutral perspective ignore the different impacts on men and women because their roles, responsibilities and capacities in any society are never the same. These differences are generally structured in a way that leaves women at a disadvantage in society by creating inequality gaps. Therefore they are an important tool for analysing the gap between expressed commitments by governments and the decision-making processes involved in how governments raise and spend money. Gender responsive budgets can contribute to narrowing such gaps. Progress towards gender equality is slow, and this is in part due to the failure to attach money to policy commitments. Overall research shows that not enough attention is given to the impact of allocated resources and this serves to perpetuate gender biases, although budgets offer the potential to transform gender inequalities. Good policy requires understanding both the impact of policy and how it might be better designed to achieve outcomes which meet the needs of women, men, and girls and boys as well as different groups of women, men and children. There is no single approach or model of a gender sensitive budget exercise.

Why is it important? Evidence suggests that the economic gains of gender equality lead to increased output and better development of people’s capacities. Women’s economic empowerment could provide the possibility for all countries to have some combination of increased productivity, less stress and better overall health. Looking at the direct and indirect impacts of government budgets forces re-evaluation of the long held assumption that government budgets and economic policies are generally “gender neutral”. The ultimate aim is to mainstream gender budget initiatives into public policy. Research has demonstrated that education for girls is one of the most effective ways of reducing poverty and that failure to invest in female education lowers the gross national product. Where has it been done? Australia was the first country to develop a gender sensitive budget with the Federal Government publishing in 1984. In South Africa, parliamentarians together with nongovernmental organisations, started working on gender sensitive analysis of budgets in 1995. The South African Government later followed in 1997 by doing a gender-sensitive

Final Proof
budget analysis. Many other countries both in the Commonwealth and in developing countries throughout the world have joined these two in undertaking these budget exercises.

In India, gender perspective on public expenditure had been gaining ground since the publication of the report of the Committee on the Status of Women in 1974. The Eighth Five Year Plan (1992-97) highlighted for the first time the need to ensure a definite flow of funds from the general developmental sectors to women. The Plan document made an express statement that “…the benefits of development from different sectors should not by pass women and special programmes on women should complement the general development programmes. The latter, in turn, should reflect greater gender sensitivity”. This approach, however, could not make much dent in ensuring adequate flow of funds and benefits to women.

The Ninth Five Year Plan (1997-2002), while reaffirming the earlier commitment adopted Women Component Plan as one of the major strategies and directed both the Central and the State Governments to ensure “not less than 30 per cent of the funds/benefits are earmarked in all the women’s related sectors”. It also directed that a special vigil be kept on the flow of the earmarked funds/benefits through an effective mechanism to ensure that the proposed strategy brings forth a holistic approach towards empowering women.

One of the major constraints in the gender analysis of public expenditure had been the non availability of gender disaggregated data at the State and district level and therefore the Department took the initiative of generating such data across the country on 18 different indicators. The National Policy for Empowerment of Women made a commitment that Gender Development Indices shall be developed by networking with specialised agencies.

The gender budgeting initiative in India started in July 2000 when a Workshop on ‘Engendering National Budgets in the South Asia Region’ was held in New Delhi in collaboration with the UNIFEM, in which Government representatives, UN agencies, media, NGOs, research institutions, civil society and members of the Planning Commission in the South Asia region participated. Noted gender auditing professional Professor Diane Elson made a presentation and shared her experiences on gender budgeting through an interactive session. National Institute of Public Finance and Policy (NIPF&P) was commissioned to study Gender Related Economic Policy Issues, which included gender segregation of relevant macro data, quantification of contribution of women in economy, assessment of impact of Government Budget on women, the role women can play in improving institutional framework for delivery of public services and the policy alternatives for building a gender sensitive national budgeting process.
Annexure

The gender-related development index (GDI)

While the HDI measures average achievement, the GDI adjusts the average achievement to reflect the inequalities between men and women in the following dimensions:

- A long and healthy life, as measured by life expectancy at birth.
- Knowledge, as measured by the adult literacy rate and the combined primary, secondary and tertiary gross enrolment ratio.
- A decent standard of living, as measured by estimated earned income (PPP US$).

The calculation of the GDI involves three steps. First, female and male indices in each dimension are calculated according to the general formula:

$$\text{Dimension index} = \frac{\text{actual value} - \text{minimum value}}{\text{maximum value} - \text{minimum value}}$$

Second, the female and male indices in each dimension are combined in a way that penalizes differences in achievement between men and women. The resulting index, referred to as the equally distributed index, is calculated according to the general formula:

$$\text{Equally distributed index} = \left(\frac{\text{female population share (female index)}^{1/e}}{\text{male population share (male index)}^{1/e}}\right)^{1/e}$$

Where $e$ measures the aversion to inequality. In the GDI $e = 2$. Thus the general equation becomes:

$$\text{Equally distributed index} = \frac{\text{female population share (female index)}}{\text{male population share (male index)}}$$

which gives the harmonic mean of the female and male indices.

Third, the GDI is calculated by combining the three equally distributed indices in an unweighted average.

Goalposts for calculating the GDI

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Minimum Value</th>
<th>Maximum Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female life expectancy at birth (years)</td>
<td>87.5</td>
<td>27.5</td>
</tr>
<tr>
<td>Male life expectancy at birth (years)</td>
<td>82.5</td>
<td>22.5</td>
</tr>
<tr>
<td>Adult literacy rate (%)</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Combined gross enrolment ratio (%)</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Estimated earned income (PPP US$)</td>
<td>40,000</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: The maximum and minimum values (goalposts) for life expectancy are the years higher for women to take into account their longer life expectancy.

Calculating the GDI

This illustration of the calculation of the GDI uses data for Brazil.

1. Calculating the equally distributed life expectancy index

First, separate indices for female and male achievements in life expectancy using the general formula for dimension indices.

**FEMALE**

Life expectancy: 74.6 years

$$\text{Life expectancy index} = \frac{74.6 - 27.5}{27.5} = 0.785$$

**MALE**

Life expectancy: 66.6 years

$$\text{Life expectancy index} = \frac{66.6 - 27.5}{27.5} = 0.735$$

Next, the female and male indices are combined to create the equally distributed life expectancy index using the general formula for equally distributed indices.

**FEMALE**

Population share: 0.507

$$\text{Life expectancy index} = 0.507 \times 0.785 = 0.390$$

**MALE**

Population share: 0.493

$$\text{Life expectancy index} = 0.493 \times 0.735 = 0.365$$

Equally distributed life expectancy index = (0.390 + 0.365) / 2 = 0.382

2. Calculating the equally distributed education index

First, indices for the adult literacy rate and the combined primary, secondary and tertiary gross enrolment ratio are calculated separately for females and males. Calculating these indices is straightforward, since the indicators used are already normalized between 0 and 1.

**FEMALE**

Adult literacy rate: 86.6%

$$\text{Adult literacy index} = \frac{86.6}{100} = 0.866$$

**MALE**

Adult literacy rate: 86.2%

$$\text{Adult literacy index} = \frac{86.2}{100} = 0.862$$

Gross enrolment ratio: 92.7%

$$\text{Gross enrolment index} = \frac{92.7}{100} = 0.927$$

Gross enrolment ratio: 95.3%

$$\text{Gross enrolment index} = \frac{95.3}{100} = 0.953$$

Second, the education index, which gives two thirds weight to the adult literacy index and one third weight to the gross enrolment index, is computed separately for females and males.

$$\text{Education index} = \frac{2}{3} \times \text{adult literacy index} + \frac{1}{3} \times \text{gross enrolment index}$$

**Female education index**

$$= \frac{2}{3} \times 0.866 + \frac{1}{3} \times 0.927 = 0.899$$

**Male education index**

$$= \frac{2}{3} \times 0.862 + \frac{1}{3} \times 0.953 = 0.884$$

Finally, the female and male education indices are combined to create the equally distributed education index.

**FEMALE**

Population share: 0.507

$$\text{Education index} = 0.507 \times 0.899 = 0.449$$

**MALE**

Population share: 0.493

$$\text{Education index} = 0.493 \times 0.884 = 0.438$$

Equally distributed education index = (0.449 + 0.438) / 2 = 0.443

3. Calculating the equally distributed income index

First, female and male earned income (PPP US$) are estimated (for details on this calculation, see the addendum to this technical note). Then the income index is calculated for each gender. As for the HDI income is adjusted by taking the logarithms of estimated earned income (PPP US$).

$$\text{Income index} = \frac{\log(\text{actual value}) - \log(\text{minimum value})}{\log(\text{maximum value}) - \log(\text{minimum value})}$$

**FEMALE**

Estimated earned income (PPP US$): 4,704

$$\text{Income index} = \frac{\log(4,704) - \log(100)}{\log(40,000) - \log(100)} = 0.643$$

**MALE**

Estimated earned income (PPP US$): 10,963

$$\text{Income index} = \frac{\log(10,963) - \log(100)}{\log(40,000) - \log(100)} = 0.784$$

Calculating the GDI continues on next page.
Calculating the GDI (continued)

Second, the female and male income indices are combined to create the equally distributed income index:

\[
\begin{align*}
\text{FEMALE} & \quad \text{MALE} \\
\text{Population share: 0.507} & \quad \text{Population share: 0.493} \\
\text{Income index: 0.843} & \quad \text{Income index: 0.784} \\
\text{Equally distributed income index} & = \left( \frac{0.507}{0.643^{-1}} \right) + \left( \frac{0.493}{0.784^{-1}} \right)^{-1} = 0.706
\end{align*}
\]

4. Calculating the GDI

Calculating the GDI is straightforward. It is simply the unweighted average of the three component indices—the equally distributed life expectancy index, the equally distributed education index and the equally distributed income index.

\[
\text{GDI} = \frac{1}{3} (\text{life expectancy index}) + \frac{1}{3} (\text{education index}) + \frac{1}{3} (\text{income index})
\]
\[
= \frac{1}{3} (0.760) + \frac{1}{3} (0.892) + \frac{1}{3} (0.706) = 0.766
\]

Why \( \epsilon = 2 \) in calculating the GDI

The value of \( \epsilon \) is the size of the penalty for gender inequality. The larger the value, the more heavily a society is penalized for having inequalities.

If \( \epsilon = 0 \), gender inequality is not penalized (in this case the GDI would have the same value as the HDI). As \( \epsilon \) increases towards infinity, more and more weight is given to the lesser achieving group.

The value 2 is used in calculating the GDI (as well as the GEM). This value places a moderate penalty on gender inequality in achievement.

For a detailed analysis of the GDI's mathematical formulation, see Sudhir Anand and Amartya Sen's “Gender Inequality in Human Development: Theories and Measurement,” Kalpana Bardhan and Stephan Klasen’s “UNDP’s Gender-Related Indices: A Critical Review” and the technical notes in Human Development Report 1995 and Human Development Report 1999 (see the list of selected readings at the end of this technical note).
The gender empowerment measure (GEM)

Focusing on women’s opportunities rather than their capabilities, the GEM captures gender inequality in three key areas:

- Political participation and decision-making power, as measured by women’s and men’s percentage shares of parliamentary seats.
- Economic participation and decision-making power, as measured by two indicators—women’s and men’s percentage shares of positions as legislators, senior officials and managers and women’s and men’s percentage shares of professional and technical positions.
- Power over economic resources, as measured by women’s and men’s estimated earned income (PPP US$).

For each of these three dimensions, an equally distributed equivalent percentage (EDEP) is calculated, as a population weighted average, according to the following general formula:

\[
EDEP = \frac{[\text{female population share \times female index}]}{[\text{male population share \times male index}]}
\]

\(\epsilon\) measures the aversion to inequality. In the GEM (as in the GNI) \(\epsilon = 2\), which places a moderate penalty on inequality. The formula is thus:

\[
EDEP = \frac{[\text{female population share \times female index}]}{[\text{male population share \times male index}]}
\]

For political and economic participation and decision-making, the EDEP is then indexed by dividing it by 50. The rationale for this indexing is that in an ideal society, with equal empowerment of the sexes, the GEM variables would equal 50—that is, women’s share would equal men’s share for each variable.

Where a male or female index value is zero, the EDEP according to the above formula is not defined. However, the limit of EDEP when the index tends towards zero, is zero. Accordingly, in these cases the value of the EDEP is set to zero.

Finally, the GEM is calculated as a simple average of the three indexed EDEPs.

Calculating the GEM

This illustration of the calculation of the GEM uses data for Denmark.

1. Calculating the EDEP for parliamentary representation

The EDEP for parliamentary representation measures the relative empowerment of women in terms of their political participation. The EDEP is calculated using the female and male shares of the population and female and male percentage shares of parliamentary seats according to the general formula.

\[
EDEP = \frac{[\text{female population share} \times \text{female share of parliamentary seats}]}{[\text{male population share} \times \text{male share of parliamentary seats}]}
\]

Then this initial EDEP is indexed to an ideal value of 50.

\[
\text{Indexed EDEP for parliamentary representation} = \frac{46.42}{50} = 0.928
\]

2. Calculating the EDEP for economic participation

Using the general formula, an EDEP is calculated for women’s and men’s percentage shares of positions as legislators, senior officials and managers, and another for women’s and men’s percentage shares of professional and technical positions. The simple average of the two measures gives the EDEP for economic participation.

\[
EDEP = \frac{[\text{female population share} \times \text{female share of professional and technical positions}]}{[\text{male population share} \times \text{male share of professional and technical positions}]}
\]

3. Calculating the EDEP for income

Earnings (PPP US$) is estimated for women and men separately and then indexed to a base year for the HDI and the GNI. For the GEM, however, the income index is based on unadjusted values, not the logarithm of estimated earned income. (For details on the estimation of earned income for men and women, see the addendum to this technical note.)

\[
EDEP = \frac{[\text{female population share} \times \text{female share of income index}]}{[\text{male population share} \times \text{male share of income index}]}
\]

4. Calculating the GEM

Once the EDEP has been calculated for the three dimensions of the GEM, determining the GEM is straightforward. It is a simple average of the three EDEP indices.

\[
GEM = \frac{[\text{female population share} \times \text{female share of index}]}{3}
\]
As a tool both for research and for structuring community-level interaction, Participatory Rural Appraisal (PRA) is now well embedded in development practice. This paper, however, argues that in order to play an enabling role towards community action, facilitators need to offer much more than the traditional PRA approach. Based on work with groups of women and of men in North Bengal, the paper describes how local politics and facilitators’ strategies interact and complicate the use of PRA-like planning approaches. The article stresses the need for effective and long-term facilitation strategies that take into account organisational, methodological, and contextual considerations, and argues that organisations need to invest far more in ensuring the quality of facilitators than is generally the case.

Background

The last 25 years have seen a remarkable shift in academic thinking on rural development from working for to working with the rural poor. Alongside this shift, those working in the water sector have stressed the need for an integrated perspective, emphasising that water is required for a variety of local needs and that a successful intervention depends upon taking its political, social, economic, and technical dimensions into account. Increasingly, efforts are being made to enable local people, institutions at various levels, and external interventions to work together in practical and efficient ways that actually strengthen the role of the water users. Within this context, various methodologies are seen as practical and engaging means to work with communities and structure the process of interaction. The family of participatory methods, of which Participatory Rural Appraisal (PRA) is a prominent member, emerged in the 1980s from dissatisfaction with ‘technology transfer’-type models based on the idea that technologies are designed by scientists and can be transferred to farmers by extension workers (Schot 1999). PRA was based on a philosophy that rejected linear, positivistic, ‘technology transfer’ models, viewing reality as complex, continually changing, and open to different interpretations (Schot 1999; Chambers 1997). It therefore emphasised the need for systems of learning and action that can ‘seek the multiple perspectives of the various interested parties and encourage their greater involvement’ (Pretty 1995). PRA and other qualitative tools have since proved their value in research and development interventions. Yet, in the day-to-day reality of implementing projects, PRA is often used in ways that are closer to the ‘old’ linear models than one might like to acknowledge. Much of this has to do with the quality of facilitation, the lack of long-term commitment to strengthening community groups, and the limitations of the tools and approaches used. Many of these issues are by now familiar and uncontroversial for anyone who has experienced PRA at the local level, but they have not yet been sufficiently reflected in changes in the overall strategies of PRA-based interventions at project or organisational level. Much can be gained from linking PRA approaches with broader reflections on group dynamics. In this paper we use a case study from planning exercises with local groups conducted in the Indian state of West Bengal. This will illustrate the importance of finding a balanced and locally specific facilitation strategy through a process of intensive experimentation, reflection, and training of facilitators. Below, we identify three broad categories of concerns that deserve increased attention in planning PRA-based interventions.
Long-term involvement

A major concern is that of the role of the facilitator and her/his involvement over time. While PRA tools are generally based on one-off or two-off sessions, facilitating local action requires a longer-term involvement in a process that goes beyond sharing knowledge and includes activities to form sustainable groups, build confidence, and provide conflict-resolution skills. Facilitation processes often lead to absolutely nothing. The community welcomes a team of facilitators with great enthusiasm, and after a highly stimulating PRA session, in which a range of (often sensitive) problems is identified, it is left without any tangible results. After the three-hour discussion time is up, people need to go back to their fields, start cooking, or take care of the kids. On the way back they wonder: what did I get out of all this? Often, expectations are raised (and disappointed), meetings become shopping-list sessions, and the ultimate aim of empowering groups to deal collectively with local concerns is nowhere near being met. Without fitting PRA into a longer-term coherent strategy for group development, local institution building, accountable leadership structures, and conflict-resolution mechanisms, all the mapping, diagramming, and discussion are in vain. PRA is too often seen as a ‘stand-alone’ toolbox and needs to be integrated into a larger context of work with small groups.

Dealing with community differences

If PRA-type approaches are to play an empowering role, they need to take into account differences within community groups and between these groups and the external socio-political environment. Facilitators need the skills and strategies required to handle differences in power and status effectively. As Irene Guijt puts it: ‘despite the stated intentions of social inclusion, it has become clear that many participatory development initiatives do not deal well with the complexity of community differences, including age, economic, religious, caste, ethnic and in particular gender’ (Guijt and Shah 1998:1). Besides internal group dynamics and differences, PRA-based approaches must also deal with the effect of the broader political and socio-economic context on the participating process. The general cultural and political environment is a key determinant for the way a community group positions itself, and becomes active or refrains from doing so (Kumar 2002).

Ensuring the quality of facilitators

The quality of facilitation is of concern in most PRA programmes. PRA studies show a bias towards well-conducted exercises: generally the first and best-documented sessions are conducted by experts, researchers, or team leaders, but the overall programmes are then run by fairly inexperienced facilitators. Facilitators often know how to use the tools (although even this is often problematic), but are generally unfamiliar with the world of ideas behind the mapping and diagrams and so on. Less experienced facilitators tend to lean heavily on going through the motions of the PRA tools, approaching a mapping exercise, for example, more as a bureaucratic requirement than a way to generate common understanding. Ultimately, the issue of effectiveness and efficiency on a larger scale needs to be addressed; in other words, how to sustain a programme in a larger number of locations, while still remaining close to the original principles of PRA.
Our case study

Our case study is taken from the upper north of the Indian state of West Bengal, and originates from activities conducted under the North Bengal Terai Development Project (NBTDP), a project sponsored by the Dutch government and implemented by a Dutch consultancy firm (Arcadis Euroconsult). The NBTDP was a fairly broad rural development project, working closely with the West Bengal Ministry of Agriculture. Besides installing irrigation facilities and supporting agricultural innovation, the NBTDP also initiated a number of group-based activities at the community level. One of these activities was the formation of women’s microcredit groups and men’s irrigation-management groups. The groups were also involved in a planning process aimed at improving village-level management of water resources for domestic use, fisheries, irrigation, etc. The fieldwork was conducted partly by the project’s own Project Support Unit (PSU), and partly subcontracted to the West Bengal NGO IBRAD (Institute of Bio-social Research and Development). IBRAD worked in a total of 60 villages in the three districts of Darjeeling, Coochbehar, and Jalpaiguri, while the PSU conducted local planning exercises (‘micro planning’) in 15 villages in the same region. Monitoring and research took place alongside the programme to help identify some of the practical methodological constraints it faced, and to look at the interaction of the groups with the larger institutional context. This article is based on that research. The original idea for the activity was for . . . groups of water users to, together with the local government, make a participatory assessment of local water resources and the opportunities and threats to them. Following this, micro water management improvements were to be identified, that would in the first instance be undertaken by the water users themselves. (Department of Agriculture 2000) The planning sessions used PRA tools to assess local circumstances and a planning matrix to define an action plan. These exercises were conducted with women’s groups, groups using small-scale river lift irrigation systems (water-user groups), and in some cases with whole villages. During a workshop on micro-planning methodologies a joint definition was agreed upon by project facilitators: ‘Micro planning is facilitating a planning process of villagers, in which local resources are identified, confidence is built, groups are formed and activated, information and training is supplied and action according to villagers priorities is supported’. Micro planning ideally embraced the idea of the development agency as a facilitator for change, whereby people initiate their own action on the basis of collective planning. While the study found that this ideal was often far-fetched, for reasons to do with the quality and experience of facilitators, it also found that the idea itself was limited in the sense that the socio-political context required much more than a shared problem analysis to activate and sustain coherent groups.

The North Bengal context

Most of the population of North Bengal depends on agriculture, generally smallholdings cultivating jute, paddy, vegetables, and other crops. Tea plantations are common in the northern parts and in highlying areas. The rice-cropping areas are characterised by scattered paras (clusters of homes) with a variety of trees and bamboo bushes, amidst a more or less open agricultural landscape of small, bunded fields. In many ways water is a decisive factor for the rural landscape, which contains a range of large rivers, and countless small rivers, streams, and ponds in the rainy season. Water is both an opportunity and a constraint.
The quality of drinking water is a major concern as water from local dug-wells tends to be highly contaminated, particularly during the monsoon, which results in high levels of disease. There is plenty of water available for agriculture, with continuing scope for the development of irrigation for dry-season cropping. Rivers supply a range of fish species, and there is great potential to boost production through pond-based fish cultivation. Water is also a threat; heavy rain or hail damages standing crops, while surface flows and shifting river courses endanger valuable agricultural land. In many areas (flash) floods occur, damaging fields, roads, and houses. The government invests considerable resources on building bridges, culverts, dykes, and protection works. Villages are generally constructed on higher land or land that has been raised artificially, in order to prevent any flooding of homesteads. Generally some 20–50 homes are grouped together to form a para, with the village’s agricultural lands lying around it. Some households comprise an extended family including parents, several brothers, and their wives and children. Communities are distinguished by the caste or tribe to which people belong and/or their origin or ethnicity. Minorities include people of Nepali or Assami origin, the 8–10 per cent Muslim population, and many who originally came from Bangladesh. In the northern blocks, tribals form a large part of the population, often working in the large commercial tea gardens, or involved in forestry. A majority of the non-tribal rural population is scheduled caste, so-called Rajbansj, who see themselves as the ‘original’ inhabitants of the region, speaking the Rajbansji dialect of Bengali. There is a higher percentage of other (higher) castes in the towns, usually with higher incomes, better education, and government jobs. In practice, it is difficult to tell whether differences are based on caste alone or on a combination of caste, income, education, and the rural–urban divide. West Bengal, like many Indian states, has adopted the three-tier panchayat system of local government. This provides for direct elections at gram panchayat (local), block, and district level. The structures of the major political party(s) play a significant role. The Communist Party of India (Marxist) (CPI(M)) has an overall majority at all levels. Over the years it has developed a finely mazed party structure, which has its base all the way down into the para level. This structure exists ‘independently’ of the panchayats and provides electoral candidates. The leftist parties owe much of their local credibility to the land reforms in the early years of their Left Front rule, the impact of which was due not so much to an administrative vigilance as to the direct intervention of organised political movements in the countryside (Chatterjee 1997:86, 147). The panchayat regulations require a quota of general and chairperson (Prodhan) positions to be allocated to women and members of scheduled castes, on a rotational basis. In practice, many of the positions for women go to candidates with limited political capabilities, often manipulated into the position by a powerful vice-chairperson. This vice-Prodhan then basically makes the decisions, while ensuring that the woman takes the blame when things go wrong. (Such Prodhans are locally nicknamed Kathr Pudl, or ‘wooden doll’.) Some of the women chairs are, however, very capable, particularly those who gained their seat through the regular political process. The panchayat system has brought politics to the villages and has fully entrenched village–government relations in party politics. Most local political strategies evolve around the panchayat’s budget for rural development. Support for the party is often rewarded by becoming eligible for benefits such as wells, latrines, seed packages, loans, or government housing schemes. The parties’ standard election campaign strategy is to target the doubters and create an atmosphere of expectation of
material benefits. After the panchayat and political system comes a range of government officials active in the rural areas. Unlike the local politicians, most of these officials live in the towns, even if their work is in remote rural areas—as is the case for most of the teachers, agricultural extension workers, health workers, and administrators. The picture of the local teacher taking the bus from town to village and back characterises the divide: generally, government employees see themselves as educated and aware, and refer to villagers as backward and unaware. The way in which villages and government interact exerts a strong drive towards keeping the villagers dependent: both through the promise of material benefits (from politicians) and in terms of cultural differences (in relation to the civil service). The challenge for facilitators working in this politicised, divided, and fairly dependent rural context is to create an atmosphere in which collective action might flourish.

**Project approach to facilitation**

During the evaluation of the programme, it emerged that facilitators, project staff, and consultants had very different expectations of what the programme was meant to achieve: to match local needs with what the government has to offer; to create local ‘awareness’ and get people involved in a programme of largely pre-set activities; through one-off sessions to give local groups ideas and motivation to take action; to strengthen and activate group structures. What happened on the ground was generally that facilitators would organise meetings with a group of women (and sometimes men), introducing them to the idea of forming a group, whether for a group saving or microcredit system or for water-management activities. If the group agreed, the facilitator in a second or third meeting would use simple PRA tools, such as mapping, historical diagrams, and other exercises, to identify local problems and jointly build a plan of action. The plan would be a simple matrix stating the action required, who would be responsible, the timeframe, and who would monitor implementation. Common activities would include various measures to ensure clean drinking water, such as applying bleach in dug wells, lifting sediment, and repairing cracks. Some groups, for instance, built local bridges, negotiated with the government for irrigation facilities, or collaborated with health workers on improving child health. Groups would usually build a meeting hut and make joint savings for local emergencies and small business activities. After (PRA) planning sessions, groups would be supported in taking forward their plans by a mix of regular meetings, group monitoring, cultural programmes, and local ‘cleaning-drives’. Some activities were organised beyond the para level, involving various dignitaries. This helped to build the status of women’s groups in relation to the ‘outside world’, and sought to give the groups recognition and confidence. After various experiments with different approaches to facilitation, it became obvious that a clear strategy for more long-term interaction and group strengthening was needed. In cases where facilitators had experimented with adopting a more laid-back stance, leaving the initiative to come from the group after in-depth PRA-based group analysis, very little happened. Action would then depend on the leadership of a VIP or large farmer in the village. In cases where the facilitator took the group along in small (but relevant) activities, more diverse leadership roles could emerge. In the more successful cases, facilitators worked with groups to organise small activities on a regular basis and build social pressure for action through group checks and balances. By doing this over a period of time, the activities became habitual in both group and household behaviours.
**Effective facilitation strategies**

To a certain extent the programme has helped to address some of the concerns that had been voiced. In particular, several women’s groups successfully addressed the need for clean drinking water and health-related issues. It was much more difficult, however, to address problems in the management of ‘open-access resources’, problems beyond the boundaries of the para, and problems requiring infrastructural investments, which are typically the domain of panchayat. These issues, traditionally male responsibilities, were not addressed by any of the groups, although both men and women had mentioned these as major concerns. Addressing individual family concerns (drinking water, health, education) through group activities was feasible, whereas the activities that would require engagement in larger-scale, politically sensitive domains was something few felt compelled to do. The newer and less consolidated groups in particular felt ill-equipped to get involved in these issues. Facilitators experimented with a variety of strategies. In some cases PRA was left rather open ended, leaving it up to the group to take further action, in others agreements were made with the local government to follow up on the planning sessions; in some cases the project even supplied some inputs, while in others long-term group building was the main focus. Ultimately the key to success was the building of long-term group structures. Groups that were not too large, had shared interests, and well-established group structures and norms had a reasonable chance of achieving their local planning exercises. Where planning was conducted with whole villages rather than with women’s or men’s groups, or on a more casual basis, very little action followed. There was fairly strong guidance from facilitators in the initial phases, for example in terms of suggestions for activities to be initiated, and in stimulating accountability and mutual social pressure towards compliance with the plan. Overall, the approach that evolved has yielded fairly good results, while experiments with fully open-ended approaches (with initiatives completely left to the group) have failed, even in groups with members who were initially highly motivated. Some of the reasons for failure included the role played by perceived hierarchies, whereby groups actually expect outsiders (whether facilitators or local political figures) to guide the activities and thus tend to wait for instructions. Many local people say they see themselves as ‘unaware and uneducated’, a view encouraged by city dwellers who see the rural population as backward, and which is further entrenched by a politicised rural landscape in which the aim is to keep voters dependent. Group leadership is often weak, and usually dependent on local VIPs, large farmers, and/or political figures. This in turn renders groups dependent on the larger political context rather than taking up activities themselves. In addition, people are often just too busy with other tasks, and will devote energy to group work only if direct tangible results are in sight. Finally, there is a great deal of mistrust within the current political climate. People would often not understand the outsiders’ interest in problem analyses at village level and suspect the facilitators’ intentions: ‘why are you so interested in all this information . . .?’ Facilitation became a complex process of fine tuning. Too much guidance resulted in inflexibility and limited group involvement; too little guidance was insufficient to build cohesive groups, give the weaker members a chance, and encourage group independence and self-confidence. Altogether, initial small-group activities helped to create an atmosphere in which people felt they could handle problems themselves rather than calling on the government. Through the starter activities, often based on facilitators’ suggestions, the groups could build
confidence that they themselves—as a group—could address some of the larger concerns as well. The small activities helped to pull the group along quickly, gain confidence and get things going, to create a sense of movement, and of action not dependent on outside political forces. Facilitators appointed a group member to monitor implementation of the planned activities and supported the negotiation of clear rules and procedures. Groups were stimulated to arrange award ceremonies for those individuals who showed the best results and to organise cultural programmes, religious ceremonies, and other occasions aimed at increasing social cohesion and applying pressure for actual implementation. Good results were obtained when local planning exercises were combined with long-term binding elements, such as a group savings and microcredit programme, because everyone had an interest in continuing the management of the common bank account. However, in cases where local government officials were involved during planning and took on a role in addressing problems that perhaps could not be solved at a local level, the results were disappointing. Whenever such officials (e.g. panchayat members) were involved in the planning exercise itself, they would make a range of promises that often remained unfulfilled. The result was that the groups became demotivated, more dependent, and less active. In order to build confident, independent, and sustainable groups it proved better to involve the government in terms of encouraging improved regional policies based on information from the villages, rather than pushing for local politicians to solve individual problems, which tended only to strengthen existing patron-client relations and group dependency. It was also more effective to involve politicians and civil servants in such a way that their role vis-a-vis individual groups was to stimulate and facilitate rather than to provide things. Well-established and independent groups could, later in the process, collectively take up possibly beneficial contacts with various departments and the panchayat without losing their own independence and action orientation. Keeping this interaction focused on exchanging knowledge and ideas rather than material needs also made it less of a political minefield of lost promises and placed the emphasis on the provision of facilities, such as irrigation. Various health workers and agricultural extension workers found a great audience and discussion partner in some of the more cohesive and active groups. Involving politicians in roles other than providing things in fact turned out to be quite useful, for example in monitoring the group’s activities, mediating conflicts, or forming a communication link between the project teams and the groups. Besides working with individual groups, the project gathered the information from the local sessions to form the basis of several policy debates with panchayat, local teachers, youth clubs, health workers, block-level administration, and representatives from the local women’s groups. The stronger women’s groups were particularly active in these meetings, which further strengthened their profile in the general political environment.

Timing of PRA sessions

While participatory tools are time efficient for researchers and facilitators, to farmers they are often time consuming. It can sometimes be difficult to get everyone together and interested for a whole exercise. In North Bengal, with several harvests a year, either the men would be working on planting or harvesting, the women on planting or post-harvest processing, or both were otherwise occupied. If a PRA approach seeks only to gather information it may be perfectly satisfactory to undertake exercises with different subgroups in the village. For the purposes of action planning with village groups, however, it is important that most
people attend so that the plan has some legitimacy. Sessions of more than three or four hours would generally be a problem, because many people had other things to do. Splitting up the sessions would not help, as the resulting split between analysis and action planning would leave members without anything tangible after the first meeting, making it unlikely that they would attend subsequent sessions. Combining problem analyses and activity planning in one session would generally leave too little time for the activity planning, so that this part of the meeting became rushed. Short PRA sessions had a tendency to become rather problem oriented, which tended to generate a negative atmosphere. It therefore proved useful to limit the time spent on analyses of local needs and focus more on guiding a process that would build common understanding and motivation for collective action. This also helped to avoid shopping-list sessions. Overall, it was better not to dwell too long on needs and problems (which PRA exercises sometimes elicit . . .), but to get on with probing the actual situation and lead people to a discussion focused on opportunities beyond the problems. This is certainly possible if facilitators know the area well (perhaps because they grew up in similar villages) or if the programme has already done more extensive work in the region. The advantage is that enough time is allowed for a discussion of a timeframe for action, the division of tasks, and monitoring responsibilities.

Action orientation

Emphasis on planning, negotiating, and writing a formal plan that is agreed upon by all participants, and less on lengthy enquiries, tended to strengthen the process. Priority ranking on the basis of possible actions rather than needs (the usual content for this PRA tool) can help to create the necessary sense of purpose and collective determination. Enthusiasm generated during a meeting is often more relevant to action planning than is the full and impartial analysis of local circumstances. Indeed, the latter could even be counter-productive in North Bengal, where needs assessments by panchayat or party apparatus are common bureaucratic requirements, but are seldom followed up with concrete action. A clear action orientation during the whole meeting is hugely important for a facilitator. The main point is to find local solutions, to motivate, and to make feasible joint plans with specific commitments for action. All the rest—the PRA tools used, the analysis of the situation, in-depth discussion of the issues—should contribute towards that goal. An action-oriented PRA would need to start out with a broad picture, but move soon to prioritisation and then quickly narrow down to two or three priorities that look promising for action planning. Later, once these issues are being addressed in practice, new concerns can be fed into the process in follow-up planning sessions. Many of the concerns mentioned by village groups are determined by highly problematic socio-economic bottlenecks: politically stubborn systems, financial or social dependency, a need for technological innovations, internal conflicts, a lack of constructive interaction with levels above the village, a lack of interest in or mechanisms to address problems in managing common resources, natural disasters, and so on. The assumption of some ‘PRA practitioners’ that PRA in itself, by enabling common analyses and increased insight, almost ‘automatically’ empowers needs to be challenged; it is generally a risky assumption. For the facilitator, and particularly researchers and consultants involved in a few PRAs in one area, sessions may be highly enlightening, and lead them to assume that this is equally
true for the group involved. Our own experience is that many groups want to please (particularly white-faced or high-ranking) outsiders, and will express interest and learning to please them. On many occasions, it appeared that great learning had taken place, but resulted in very little action. It should not simply be assumed that PRA sessions will help a group to gain new ideas from outsiders: farmers are not stupid, but generally face real and intractable constraints. These constraints may be economic, technical, environmental or political; they may also include social divides or a lack of options to work collectively, rather than a lack of ideas. There were several cases where I (WS) as an outsider, and other ‘experts’, were involved in a brainstorming session with a group of farmers to generate new ideas for solving a certain village problem, but every single idea that we came up with they had already thought of earlier but had discarded for good reasons. The best that a session can deliver is a sense of determination and enthusiasm to take up group action where individual action had so far failed, not radically new solutions or ideas.

**Group heterogeneity**

The facilitators chose to emphasise typical ‘women’s issues’ (education, sanitation, health) with the women’s groups. This generated enthusiasm with the groups, for whom these were important topics. But it also meant that facilitators missed the opportunity to involve the women’s groups in issues beyond the ‘traditional’ domains. Expectations quickly formed: women will work on clean drinking water, health, education, sanitation, and keeping the village roads clean, whereas men will work on irrigation improvements, flooding, or fisheries. In their daily lives, many women do have an important role in the domains ascribed to men, but in the end the facilitators reinforced traditional gender roles. Within the groups, the young women were the most active participants and usually the driving forces behind the group’s activities. They tended to be the secretary or cashier, the most influential positions in the committees. They are also better educated than the older women (women’s average literacy rate is 33.2 per cent compared to 56 per cent for men) (Government of West Bengal 2001). In the men’s groups, however, it was those between the ages of 40 and 60 years who generally dominated. The young men would be quiet, while the old babus generally did not speak much, having already partly withdrawn themselves from the world—whenever they do speak, however, everybody listens. It was therefore important for facilitators to use these internal dynamics, but also encourage less outspoken members to come forward. Groups contain a heterogeneous mixture of opinions, interests, and/or hidden agendas. The ‘reality’ that presents itself through PRA is seldom the reality. The notion of ‘community needs’ can also be quite deceptive. Every villager has his/her own ideas of what the needs of ‘the community’ are; the outspoken, politically influential people will try to impress their own concerns and needs on the discussion. Groups also tend to adapt their perceived ‘needs’ according to what they think the facilitator wants to hear, or to the areas in which they think the facilitator can help. The way meetings are set up, the specific questions asked, and the categories used in PRA charts (e.g. the historical transect), influence the direction of the meeting and the action plans. A good way to deal with this, when working in teams of two or three facilitators, is for one member not to participate directly but observe who is involved and who isn’t, what biases emerge, and how the group responds to the facilitator.
Quality of facilitation

The approach described here depends upon maintaining the subtle, flexible, and difficult process of facilitating and guiding a planning process, guarding against blueprint sessions and activities. The mismatch between local needs and group activities generally results from the lack of listening and facilitation skills. Used properly and in a flexible manner, PRA can help to structure a discussion on local realities. However, things can go seriously wrong when using PRA becomes an end in itself. The training of facilitators should therefore focus on the principles of PRA and facilitation strategies rather than on the tools, which is where the emphasis tends to be placed. Sadly, although most development workers now realise the importance of good facilitation, many organisations still hire anyone off the street, only to put them back on the street again a couple of years later, when the project has ended. Much more needs to be done to build management systems that are geared to developing good facilitators, through training, monitoring and evaluation, long-term human resources management, and integration with government institutions/programmes. Certainly, PRA helped to provide an insight into the realities of the villages in North Bengal, and to elicit some interesting issues, particularly in the sessions conducted by more experienced facilitators. However, some of the disadvantages of using a typical PRA-type approach were also encountered. First was the dangerous assumption that if a facilitator knows the PRA tools, s/he can facilitate community meetings effectively. Second, PRA is essentially a research tool, developed to generate knowledge of local realities efficiently and in a participatory way. But while it emphasises that joint knowledge and awareness are the agents of change, it focuses less on other bottlenecks. Without negotiation, group-building, and motivation skills, PRA facilitators ultimately have very little to offer. PRA should thus be embedded in an extensive strategy for working with groups over a longer period, so that through experimentation, research, monitoring, and training, context-specific strategies for the whole process can evolve. These strategies should be action oriented and challenging, but also practical, flexible, and simple enough for relatively inexperienced facilitators to use. It is vital to involve the facilitators in developing this so that the strategy connects with the skills and opportunities of the fieldworkers. While the facilitators are often the lowest-paid employees within a project, the quality of the project itself depends on them. Obviously, if an organisation preaches participatory practices in its fieldwork, then it should apply the same principles to the way it treats its own staff.

Conclusions and recommendations

Micro planning sought to achieve the dual goal of activating local groups and involving the government in addressing local concerns where local communities could not do so themselves. In practice, however, these two goals tended to clash. Groups would wait for the government to act and then try to get as much as possible out of any participating representatives (and project workers), often resulting in disappointments later. This tendency was further strengthened by the political system in North Bengal, which emphasises the government’s role as ‘provider’ (or promising to provide) and uses this to consolidate its own political position. However, many established groups will survive (at least for a few years), and we feel that they have helped to strengthen social cohesion, reinforce people’s feeling of independence, and establish some
good water-management practices. Facilitating local action through micro planning in the context of North Bengal did occasionally have the intended ‘empowering’ impact, but for the impact to be more lasting and on a larger scale the socio-political mechanisms of dependence need to be taken into account and challenged, where possible, by the groups themselves. The link between government departments and village groups can be a healthy one if it is focused on discussion and the exchange of information, rather than revolving around material benefits. The same goes for the contact with the panchayat system, where results were good when it played a monitoring rather than a providing role, particularly among 652 well-established and confident groups. Action took place where facilitators were able to help create a sense of collective responsibility and a shared vision of a collective solution to a given concern. In conclusion, local planning should start at the beginning of a project cycle, allowing time for local concerns to feed back into the design and management of the project, and with opportunities to scale up information from the village level to regional policies. Micro-planning groups require a framework, a set of group-binding elements and focused goals that link into the planning process (water-users’ group, microcredit, etc.). There must be sufficient time and expertise to build a context-specific strategy through experimentation, reflection on the fieldwork, and research that involves all the fieldworkers. PRA may provide some useful tools, but more importantly it should foster a commitment to take seriously the realities of groups themselves. However, PRA needs to be part of a broader strategy for the facilitation process, and facilitators need to keep a critical perspective on the ways in which PRA tools contribute to the overall dynamics of working with the group. Facilitators need to be well trained and to operate within a long-term strategy for human resources management. Training should take into account the underlying principles of PRA, not merely its tools, and should also highlight the ways in which PRA can be improved at low cost, and offer both facilitation skills and strategies for the process beyond PRA. If a project or programme is to be conducted in a participatory fashion, then the organising agency should also work in a participatory, open, engaging, and transparent manner, seeking to bridge its own hierarchical divides. Fieldworkers should be treated as partners and taught the principles of PRA, and not just the tools and techniques. Finally, it is important to foster an enabling political-institutional environment and to guard against unrealistic expectations raised by the project or NGO staff, or the government officials involved. Bringing in the government and guiding it into a facilitating role can be useful, provided this can be done without creating dependency on individual politicians or departments. At its best, however, such collaboration can provide a communication channel through which to advocate on specific concerns through the higher echelons of government.

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Note
1. A range of useful ideas on group dynamics can be found in the sociological literature pre-dating the emergence of PRA (e.g. Mills 1967; Phillips and Erickson 1970).

References


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DEVELOPMENT OF COLLABORATION – PRINCIPLES GAME

AIMS
1. To show how principles emerge in competition.
2. To emphasise the merits of collaboration.

GROUP SIZE
Two teams required of not more than eight members each.

TIME REQUIRED
Approximately one hour.

MATERIALS
Copies of Principles Game Tally Sheet for all participants.

PHYSICAL SETTING
Enough space for the two teams to meet separately without overhearing or disrupting each other. A separate location where team representatives can meet in round 4, 9 and 10.

PROCESS
1. Divide the group into two sub-group - a “green” team and a “red” team. Seat the groups apart from each other and ask the teams not to interact with the other during the exercise except when instructed to do so.
2. Distribute a copy of the Principles Game Tally Sheet to each participant. Give members time to study the directions and scoring and ask if there are any questions.

Tell the two teams that the objective is for each group to score as many points as possible. Explain that no one will probably understand clearly how the game is played until the activity proceeds.

3. Round 1 begins. Each team is given **five minutes** to decide on a letter. When the time is up, each team passes its decision to the facilitator. The scoring is computed on the Principles Tally Sheet and the score passed back to each team member.

4. **Rounds 2 and 3** are conducted in a similar manner to Round 1, but with **three minutes** for discussion in each round. The scoring for each round is entered on a Principles Tally Sheet and the scores passed back to each team member.

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1 [Adapted from “PEOPLE AT WORK-A Practical Guide to organisational change” - Dave Francis & Mike wookcock (University Associates Inc, La Jolla, California, 1975)]
5. For **Round 4**, each team sends one representative to a neutral place to negotiate ‘for **three minutes**. Then the representatives return to their teams. After **three minutes**, each team passes its decision to the facilitator. The outcome of the round is doubled and the score is computed and passed to each team member.

6. Rounds 5 to 8 proceed in the same manner as the first three rounds, with three minutes for discussion in each. The score is computed after each round and passed to each team member.

7. In **Round 9**, another special round is conducted like Round 4, the outcome is **multiplied by 5**. The score is passed to each team member.

8. **Round 10** is conducted in the same way as Round 9, except the outcomes are **multiplied by 10**.

9. The entire group meets to tally the final score and to discuss who won and why. The following questions should be considered:

   How do you feel about the other members of your own team?

   How could you have achieved a higher score?

   What lessons are there for management?

   What is required for successful negotiating?
PRINCIPLES GAME TALLY SHEET

DIRECTIONS

For ten rounds, the green team will choose either an ‘A’ or ‘B’ and the red team will choose either an ‘X’ or a ‘Y’. The score for each team is determined by both teams’ joint decision. It is computed according to the following schedule:

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<thead>
<tr>
<th>Green Team choice</th>
<th>Red Team choice</th>
<th>Score</th>
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<tbody>
<tr>
<td>A</td>
<td>X</td>
<td>Both teams win</td>
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<tr>
<td>A</td>
<td>Y</td>
<td>Green team loses</td>
</tr>
<tr>
<td>A</td>
<td>Y</td>
<td>Red team wins</td>
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<tr>
<td>B</td>
<td>X</td>
<td>Green team wins</td>
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<tr>
<td>B</td>
<td>Y</td>
<td>Red team loses</td>
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<td></td>
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<th>CHOICE</th>
<th>CUMULATIVE POINTS</th>
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<tr>
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* Results are doubled for this round
** Results are multiplied by 5 for this round
*** Results are multiplied by 10 for this round
DEVELOPMENT OF COLLABORATION

The Facilitator may help the participants gain perspicacity in the process of the development of collaboration amongst individuals and groups. The following dimensions are suggested in this regard.

**Bases of Collaboration: Power and Trust**

One important condition which contributes to the development of collaboration in a group is the perception of power. Power can be of both kinds: power to reward and power to punish. Reward and punishment are used in a wider sense. Punishment may be in the form of depriving the other person or group of the rewards which he or his group is likely to get. Everyone in the system has at least the negative power of depriving the other person of something that is desirable to him. In this game one group may decide to deprive other groups from winning together. Thus even one group or one individual can use such a negative power. Negative power can be used by holding back information, or misleading the other person and so on. Even the person at the lowest level in the organisation can use his negative power by creating annoying situations, delaying matters, holding back information, giving information that creates misunderstanding etc. Every person in the system seems to have some kind of power, which should he not only, perceived very clearly, but also demonstrated. If in a situation people do not perceive the other person’s power they are likely to use the power in a competitive framework. On the other hand, if a person involved is not demonstrating the power this can also lead to a continued exploitative activity (use of competition by the other party).

Unconditional cooperation does not lead to the development of collaboration. Unconditional cooperation by one party may communicate a lack of power. If this happens, the other party will find it more and more difficult to get into a collaborative relationship. For effective collaborative behaviour the perception of power of both is essential.

Many researches have shown that cooperation emerges after some competitive moves by the groups concerned, in this process the various parties or individuals involved in the situation demonstrate to one another the power they have, and their ability to use power. Researches have also shown that competitive move or some kind of stalemate in a relationship can result in collaboration, particularly in situations in which the parties concerned are competitive by nature. In situations where parties are collaborative by nature, a stalemate of negotiation and relationship goes against collaboration.

Along with the perception of power, it is important that the parties concerned perceive that the power that the other party has will not be used against it. This is a part of trust. Some amount of mutual trust is likely to lead to cooperation. Trust indicates the high probability that the power of the concerned party or individual will not be used in a benevolent way.

A combination of perceived power and a minimum level of trust leads to cooperation. This is shown below.
As shown above, collaboration results from a combination of perceived power of both minimum trust in one another. In a no-trust condition there may be coercion and exploitation if the other person is seen as weak, or submission or compliance if he is seen as having power; if the perception is that neither have power, there may be an indifference for one another; the perception that both have power may lead to either competition or individualistic behaviour. Under conditions of high trust perception of the partner having low power may lead to nurturance (paternalistic attitude); the perception that he has power may result in dependency: the perception that neither have power may generate mutual sympathy. It is only what both perceive, as well as it is clearly demonstrated that both have power, and there is enough trust in one another that collaboration emerges.

Figure 1 shows that collaboration results from three main factors: the perception that the goal is shareable by both (or all) concerned, the perception that both (or all) involved have power, and a minimum level of trust prevailing amongst those involved in the task. The absence of these may result in low (or an absence) of cooperation. We thus see that trust interacts both with power and the super-ordinate goal.

**The Final Step in Building Collaborations**

In the final analysis, cooperation results from the initiative taken by one person or one group to cooperate. This is a kind of risk-taking on the part of the individual or the groups. This is also making oneself vulnerable. This turns the win-lose strategy into a win-win strategy. A win-lose strategy can only be temporary as it changes into either a lose-lose or a win-win strategy. In a non-zero-sum game like this exercise, the individual or the group who makes the cooperative move runs the risk of losing a great deal and have a lower payoff. This risk, the initiative demonstrating the courage to lose initially for the benefit of all the parties concerned, taken by an individual or a group is the key to the development of cooperation. However, this has to be after the other parties concerned perceive the power this group or the individual has. This risk-taking is important in combination with trust and demonstration of one another’s power. It is only after this has been achieved that both mutual trust and mutual power lead to the risk-taking tendency, but not the other way round. Only the risk move leads to cooperation, so that the team that takes the initiative, making itself vulnerable, is able to start the process of change towards collaboration. This inner strength of the team to be able to make such a move helps to build a collaborative relationship.
DECISION BY CONSENSUS: LOST AT SEA

Time - 2 hours

Completing the rankings - 45 minutes

Group discussions - 15 minutes

Processing of Experience (Lecture discussion) - 1 hour

Learning Outcomes

The following are the main objectives of this exercise.

1. Experiencing and developing insight in the process of making a decision in a group.

2. Experiencing and understanding the process of and the factors contributing to the development of consensus.

3. Developing an insight in the various processes involved in decision making groups—problem solving processes, task facilitating processes, and group building processes.

4. Becoming sensitive to the resources available in the group, and the need to make use of such resources.

5. Developing insight into the conflict between the concern for evolving an effective decision (achievement motive) and the concern to get one’s own point of view or solution accepted in the group (power motive).

RATIONALE

The exercise essentially consists in comparing the decision made by individual members with that made by them as a group. The idea of involving a group in decision making is that the collective “wisdom” of a number of individuals will produce a more effective decision than one made by a single individual, howsoever competent he may be. This is the idea of synergy—Synergy or synergism is the simultaneous action of separate agencies which, together, have greater total effect than the sum of their individual effects. Typical examples of synergy are the combined or cooperative action or force of different organs of the body, as of muscles working together, which is much greater than the arithmetic sum of the forces of the individual organs/parts had they been working separately of one another.

1 Adepted from “The 1975 Annual Hand Book for Group Facilitators” J. William pfeiffer and John E Jones/Editors. (University Associates, Inc/ La Jolla, California, 1975)
LOST AT SEA A Consensus-Seeking Task

AIMS

1. To explore the effectiveness of consensus-seeking behaviour in groups through experiences with individual decision making and group decision-making.
2. To explore the concept of synergy through group decision making.

GROUP SIZE

Any size group split into syndicates of five to twelve participants. Several syndicates may be directed simultaneously. (Synergistic outcomes are more likely to be achieved by smaller groups, e.g. five to seven participants.)

TIME REQUIRED

Approximately one hour.

MATERIALS

1. Pencils.
2. Two copies of the Lost at Sea Individual Worksheet for each participant.
3. A copy of the Lost at Sea Group Worksheet for each syndicate.
4. A copy of the Lost at Sea Answer and Rationale Sheet for each participant.
5. Flipchart paper and felt-tipped markers.

PHYSICAL SETTING

Facilities for both privacy in individual work, and for syndicates to hold discussions without interrupting each other.
PROCESS

1. The facilitator distributes two copies of the Lost at Sea Individual Worksheet to each participant and asks each person to complete the forms in duplicate including their name. Emphasise that participants are to work independently during this phase and that they have a maximum of fifteen minutes to complete the worksheet.

2. After fifteen minutes, the facilitator collects one copy from each participant. The other copy is for use in the syndicate.

3. The facilitator forms syndicates of five to twelve participants and tells them to work in specific areas either in the room or in syndicate rooms. The membership of each syndicate is worth planning in advance so that it can be organised smoothly. Listing the members of the syndicates on a flipchart is an effective way to do this.

4. A representative of each syndicate is given a Lost at Sea Group Worksheet. The trainer then reads the instructions to the group, emphasising that each member of a syndicate should partially agree with the syndicate choices to establish consensus, but that they are not to use such techniques as averaging, majority voting, or trading to reach agreement. The syndicates should be asked to make serious efforts to achieve success in this task.

5. The syndicates should then be sent to complete the task with a time limit of thirty minutes.

6. While the syndicates are engaged in their task, the facilitator marks the individual ranking sheets. The score is the sum of the differences between the “correct” rank for each item and its rank on the Individual Worksheet (all differences should be made positive and added). Higher scores have greater negative implications. The facilitator then totals all individual scores for each syndicate and divides by the number of members to obtain the average individual score for each syndicate.

7. After thirty minutes, the facilitator collects the Group Worksheets making sure that they are named for each syndicate and invites the syndicates to come back together. The participants should be invited to discuss their consensus-seeking approaches to performing the task.

   What difficulties did they encounter? How did they resolve them?

   How happy were they with their result? Did they use the time effectively?

   These questions may be written up on a flipchart for the group to consider.

8. The facilitator then scores the Group Worksheets as was done for the Individual Worksheets. If there are two facilitators one may mark the Worksheets while the other leads the discussion.

9. The facilitator then prepares a chart such as the one following, summarising the statistics.
### BEFORE GROUP DISCUSSION

<table>
<thead>
<tr>
<th>Group</th>
<th>Average Individual Score</th>
<th>Score of Most Accurate Individual</th>
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<tbody>
<tr>
<td>Example</td>
<td>55</td>
<td>45</td>
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<td>Average for all groups</td>
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### AFTER GROUP DISCUSSION

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<thead>
<tr>
<th>Group</th>
<th>Score for Group Consensus</th>
<th>Gain/ Loss Over Average Individual</th>
<th>Gain/ Loss over Most Accurate Individual</th>
<th>Synergy*</th>
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<tr>
<td>Example</td>
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<td>Yes</td>
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<td>Average for all groups</td>
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* Synergy is defined as having occurred when the consensus score is lower than the lowest individual score in the syndicate.

10. The facilitator returns all Individual and Group Worksheets and distributes a copy of the Lost at Sea Answer and Rationale Sheet to each participant. After allowing the group a few minutes to discuss the answers and rationale, the facilitator analyses the statistics and explains the synergy factor.

11. The facilitator leads a discussion of the comparative outcomes of individual rankings and group consensus rankings. Discussion questions such as the following might be suggested by the facilitator:

- What behaviours helped or hindered the consensus-seeking process?
- What patterns of decision-making occurred?
- Who were the influential members and how were they influential?
- How did the group discover and use its information resources? Were these resources fully utilised?
- What are the implications of consensus-seeking and synergistic outcomes for intact task groups such as committees and staff of institutions?
- What might be the consequences of such a process for the group’s attitudes?
Processing the Exercise

The following dimensions need to be brought out during the processing of the experience in the exercise.

1. **Motivational Dimensions of Consensus:** The trainer may ask the volunteers from the various groups to share with others what they thought was the main focus of the group while it was involved in decision making. What was the prevailing meta-climate, one of arriving at an effective decision or one of getting one’s opinion accepted. The first orientation is that of achievement motivation, and the second that of power motivation. In the process of decision-making the group may range between two extremes. One extreme may be the main concern of getting one’s own point of view accepted. On this extreme the members are concerned about whose views will be accepted, instead of being concerned with the problem on which a decision is to be made; they are more concerned about the personal influence they can wield and they use various methods of testing the strength and power which different members have. On the other extreme is the focus on making good decision, generating resources in the group, and pooling and using the resources. The decision making process can be near one of these two points in a continuum. We can broadly say that the decision making in a group can be either by the process of division (power, or by the process of consensus (achievement).

In the process of division, the strength of various members is tested and the group gets divided. In the process of consensus the strength of various members is brought to bear on the best possible decision. Consensus does not necessarily mean unanimity. It means the sharing of differences, listening to one another accepting the final choice in spite of the difference which may still exist. As a result of consensus, all members of the group do not come to the same conclusion. The differences may continue. However, members have an opportunity to express such differences, discuss the rationale behind the different points of view, and have the satisfaction that the members of the group have listened to them and they in turn listened to the logic put forward by the other members. At the end of such discussion the members come to a conclusion that one optimum solution is to be selected. And this helps them to accept one solution out of several alternatives, even though some of them may not agree with that alternative completely. However, the commitment of the members to the implementation of the solution is assured.

2. **Facilitating and Hindering Factors in Consensus Building:** The trainer may probe two contrasting groups to find out what factors helped one group to move towards consensus, and what factors hindered such a movement in the case of the other group. Usually the following factors hinder consensus building:

(a) **Domination by a few:** When there is a tendency by some members to dominate in a group, and influence the decision, consensus is difficult to develop.

(b) **Withdrawal:** The natural result of domination by a few is withdrawal by several other members when they do not see an opportunity to express themselves freely and influence the process of decision making.

(c) **Tendency to make quick decision:** When members of the group rush to make decision very fast the possibility of consensus decreases. Consensus would require patience, and members’ tendency to pay attention to the opinions of other members. This takes time.
(d) **Testing strength:** In the process of decision making, when some ways are used to test the strength and take a decision according to the strength either on the basis of numerical strength or on the strength of argument, the group splits. Instead of moving towards a consensus there is always a tendency to break the group into divisions. Voting in a group to find the majority and minority opinion, does not help the group to move towards a consensus because the members holding the minority view usually fail to commit themselves to the decision taken by the majority.

(e) **Avoiding confrontation:** When the members of a group avoid confronting differences in making the choice by continuous discussion, the possibility of consensus decreases. One way to avoid confrontation is to use a third party intervention or decided by chance like flipping a coin.

(f) **Trading or compromising:** Sometimes, people in order to get their suggestion or point of view accepted, trade their own point of view with some others; this way they come to an agreement that the suggestion given by one member will be accepted in exchange of another suggestion given by another member. This kind of trading or compromising reduces the possibility of consensus.

The following factors have usually been reported to help build consensus.

(a) **Concern for others:** The basis of consensus is respect and concern people have for one another. This also helps them to look for expertise and the resources available with the different members.

(b) **Listening:** A consequence of respect and concern for others leads people to listen carefully to what others say, rather than being obsessed with their own ideas about a problem.

(c) **Identifying and using resources:** People in the group realise that each member is a special resource. In order to make a good decision it is necessary that all the resources are utilised. The group takes active steps, to find out what the dimensions of the problem are, and if anyone in the group seem to have necessary resources on the various dimensions. It is recognised that different members have different skills. Without necessarily formal discussions on the matters an effective group brings to use these skills in order to perform its task effectively.

(d) **Discussing underlying assumptions and logic:** When people discuss not only their own suggestions and ideas - but also why they are proposing these and what the underlying rationale of these suggestions and ideas is the movement towards a common understanding becomes easier and the group is able to move towards consensus.

(e) **Testing consensus and disagreements:** A consensus is reinforced when after some amount of discussion the members of the group examine if there are still some disagreements; and such disagreements are allowed to be expressed and discussed. However, if agreements are not discussed and avoided, or are not voiced it would be difficult to develop a consensus. From time to time the group may stop and see whether enough consensus about what is being decided exists.

(f) **Process orientation:** The group which spends some time on the process is able to develop consensus faster. Instead of being concerned only with the task, the group is also concerned about how people are feeling, whether some people have withdrawn as a result of some hot exchange of feelings, how many people are speaking and how many are silent, how fast the group has been going etc. Such questions, when discussed from time to time, will help the group to move towards consensus.
3. **The Problem Solving Process**: In developing a consensus it is necessary that enough attention is paid to the process of problem solving. The process involves several aspects like the following. The trainer may elicit these by the appropriate probing of the groups and may emphasise their importance. As will be seen from the following discussion the consensus involves both generating alternatives, as well as the narrowing down of the choices, resulting in an agreement amongst members of the group.

(a) **Deciding priorities**: The effective groups in such exercises have been found to spend enough time discussing the main priorities. For example, in this exercise they debate about the priorities of survival, locomotion, and communication (being spotted out by a search party). Such a discussion may narrow the objectives for the members, and they may take the first step of moving towards consensus by agreeing on the objectives.

(b) **Analysing the problem at several levels**: The problem may seem to be single, but it may have several aspects. For example, in this exercise the problem need to be analysed at these levels: the psychological conditions of the survivors; the conditions of the desert; implications of these conditions for survival, locomotion, and communication; effect of dehydration and so on. When the time is spent on the discussion of such dimensions, the various aspects of the problem are clarified, and the issues for decision-making get considerably narrowed.

(c) **Generating alternatives**: Before the final decision making, a number of alternatives need to be considered. When members give different opinions, or advance what may be called “theories” on which action will be based, the possibility of making a more rational choice increases.

(d) **Discussing consequences of each alternative**: Before the group makes the final decision, two processes are important. One is to consider the consequences of the various alternatives generated. For example, one alternative here may be locomotion. If this is accepted what are the consequences: how long can a person walk during the day/during the night; how much energy he will be left with to take other actions etc.

(e) **Developing criteria for discussion**: An effective group does not rush into the final decision but spends enough time on deciding on the criteria against which the decision will be judged. The priorities discussed will help in generating the criteria.

(f) **Reviewing**: In the end, the group gets an opportunity to make the necessary corrections and modifications if it plans some time to review the decision in the light of the accepted criteria.

4. **Task Facilitating Processes**: Several processes help in making effective decisions. Some of these relate to task accomplishment. The following aspects are worth mentioning in this connection.

(a) **Initiative**: Unless members of the group take the initiative to discuss no task can be properly accomplished. It needs to be stressed that the responsibility of effective group functioning lies on each member in terms of his initiative in various matters. It may be discussed why some people took initiative and others did not.
(b) Information seeking: Members, who ask for more and more information in the group, help in discovering new things that may help in decision-making. For example, in this exercise, questions like the following may be helpful: “Who in this group has lived in a desert? How long can a man survive without food? After how long of deprivation of water does dehydration set in? How far can the reflection of a mirror be seen? Why?”

(c) Information giving: The complimentary part of seeking information is giving information. Information would also include opinions, doubts, special knowledge one has, what one has read, etc. Generating such information by the various members may help in clarifying the issues, and narrowing (zeroing in on) the choices.

(d) Summarising: As the proceedings move on, people tend to forget what has been discussed, what have been agreed, and where the differences persist. A member who summarises the Position at such a point of time plays an important role, and facilitates the task process.

(e) Synthesising: Synthesising helps in reaching and pointing out the underlying similarities in the apparently different opinions expressed by two or more members. Consensus building is helped by the revelations of such implicit agreements and common understanding.

(f) Time keeping: When the priorities are discussed, a group may also discuss how they would like to utilise their time, and will distribute the available time. Some members may remind the group how much time has already been spent on some aspects, and how much work remains to be done. Such reminders help the group take timely Corrective actions.

5. Group Building Processes: While the task processes help in effective completion of the task, attention to the group building processes has to be paid, otherwise the group does not function as a cohesive and mutually supportive group. The following are some of the important group processes.

(a) Listening: Listening indicates the regard members have for one another. Listening by one member to what the other member is saying will generate reciprocal listening and the important contributions by various members can be brought out.

(b) Expressing and responding to feelings: Even when the group is seriously discussing a task, paying attention to the feelings of the members is important. In effective groups members both freely express their feelings (“I feel confused,” “I feel I have not been listened to”) and respond to others’ feelings (“can you elaborate on your feeling that you have been ignored?” “I also feel confused now”). Such expressions help in the faster accomplishment of the task.

(c) Gate keeping: When several members enthusiastically speak at the same time, confusion is created. A member may point out that he cannot hear when so many persons speak simultaneously, and may request a particular person to speak first, and then may invite the next one to say what he has to say. This is called gate keeping function, which can be taken up by any member in the group—in fact, the more the members perform this function from time to time, the better it is likely to be for the group.
(d) **Supporting:** The more the members support one another, the more effective the group is. Support is provided by reinforcing a member’s point of view or information by another, and also includes encouraging silent members, and those who are shy, to contribute to the discussion.

(e) **Process reviewing:** The group may from time to time review what has been done and how the group has functioned. For example, a member may raise a question as to how the various members feel about the decision, or if there are still some members whose opinion has not been taken, etc.

6. **Decision by Consensus:** The exercise focuses attention on the process of effective decision making, the process of development of consensus. The trainer may like to summarise the learning from the experience in the exercise. Decision-making involves making a choice from the available or generated alternatives. When a decision is made by a face-to-face group (a task group or a committee, or a departmental team) every member is a potential contributor to the process of decision making which involves understanding the problem or the issue, breaking down the problem or the issue into its meaningful components which indicate the real problems on which the decisions are required, formulating a general strategy in terms of the sequence of action steps, generating alternatives, providing and pooling required information, generating favourable and unfavourable points for each alternative, coming to a shared understanding, making a final choice, and getting commitment of all members to the choice made. The main advantage of a group is that it has more resources than a single individual has, and as the saying goes no one of us is as bright as all of us.

Decision by consensus creates synergy in the group. When members listen to one another, use the resources represented by one another and arrive at the decision to which they seem to be committed in spite of their personal differences of opinion, we may find that the decision made may be even better than taken by the most capable person in the group. The group in a way is able to produce even more than the total sum of the resources represented in the group. This is the concept of synergy. The group can move towards synergy by taking steps to continuously mobilise the group as a team and identify and use the various available resources.

The following learning points may emerge from the exercise and discussion:

* Synergy may happen, resulting in the team answer being better than any individual answer.
* Decision making in teams is often difficult and time consuming.
* Negotiating group decisions after individuals have made decisions is difficult.
* It is tempting to compromise rather than negotiate.
* Time pressures lead to bigger compromises.
* Dominant individuals may reduce team synergy
* Effective teams recognise and value the expertise of individual members.
* Teams tend not to manage their time effectively.
* Finding the reasons for individual team members decisions is a better strategy than arguing over details (such as the positions of particular items).
* Effective teams foster commitment to team success.
When leading the discussion the trainer should be careful to ask questions based on observed behaviours. The group should identify their own learning points from what happened. They should not be told what should have happened or which learning points they ought to have identified. If the group are told what they should have learned there is a risk that they will reject the learning.

VARIATIONS

1. Observers can be used to give feedback about either group behaviour or individual behaviour.
2. A lecturette on synergy and consensus-seeking can immediately precede the group problem-solving phase to establish a mental set toward co-operation.
3. Participants can be given only one copy each of the Lost at Sea Individual Worksheet and instructed to score their own sheets.
4. Participants can be asked to complete their selection again after the group decision to see whether they have improved their personal score.
LOST AT SEA INDIVIDUAL WORKSHEET

Name ______________________________________________________________________________________
Group _____________________________________________________________________________________

Instructions: You are adrift on a private yacht in the South Pacific. As a consequence of a fire of unknown origin, much of the yacht and its contents have been destroyed. The yacht is now slowly sinking. Your location is unclear because of the destruction of critical navigational equipment and because you and the crew were distracted trying to bring the fire under control. Your best estimate is that you are approximately one thousand miles south-southwest of the nearest land.

Below is a list of fifteen items that are intact and undamaged after the fire. In addition to these articles, you have a serviceable, rubber life raft with oars large enough to carry yourself, the crew, and all the items listed below. The total contents of all survivors' pockets are a package of cigarettes, several books of matches, and five one-dollar bills.

Your task is to rank the fifteen items below in terms of their importance to your survival. Place the number 1 by the most important item, the number 2 by the second most important, and so on to number 15, the least important.

1. Sextant (A navigation instrument for measuring angular distances)
2. Shaving mirror
3. Five-gallon can of water
4. Mosquito netting
5. One case of army rations
6. Maps of the Pacific Ocean
7. Seat Cushion (flotation device approved by the Coast Guard)
8. Two-gallon can of oil-gas mixture
9. Small transistor radio
10. Shark repellent
11. Twenty square feet of opaque plastic
12. One quart of 160-proof Puerto Rican rum
13. Fifteen feet of nylon rope
14. Two boxes of chocolate bars
15. Fishing kit
LOST AT SEA GROUP WORKSHEET

Instructions: This is an exercise in group decision-making. Your group is to employ the group consensus method in reaching its decision. This means that the prediction for each of the fifteen survival items must be agreed upon by each group member before it becomes a part of the group decision. Consensus is difficult to reach. Therefore, not every ranking will meet with everyone’s complete approval. As a group, try to make each ranking one with which all group members can at least partially agree. Here are some principles to use in reaching consensus.

1. Avoid arguing for your own individual judgements. Approach the task on the basis of logic.
2. Avoid changing your mind if it is only to reach agreement and avoid conflict. Support only solutions with which you are able to agree at least somewhat.
3. Avoid “conflict-reducing” techniques such as majority vote, averaging, or trading in reaching your decision.
4. View differences of opinion as a help rather than a hindrance in decision-making.

— Sextant
— Shaving mirror
— Five-gallon can of water
— Mosquito netting
— One case of army rations
— Maps of the Pacific Ocean
— Seat cushion (flotation device approved by the Coast Guard)
— Two-gallon can of oil-gas mixture
— Small transistor radio
— Shark repellent
— Twenty square feet of opaque plastic
— One quart of 160-proof Puerto Rican rum
— Fifteen feet of nylon rope
— Two boxes of chocolate bars
— Fishing kit

Final Proof
LOST AT SEA ANSWER AND RATIONALE SHEET

Officers of the United States Merchant Marines ranked the fifteen items and provided the “correct” solution to the task.

According to these “experts”, the basic supplies needed when a person is stranded in mid ocean are articles to attract attention and articles to aid survival until rescuers arrive.

Articles for navigation are of little importance. Even if a small life raft were capable of reaching land, it would be impossible to store enough food and water to survive during that period of time. Therefore, of primary importance are the shaving mirror and the two-gallon can of oil-gas mixture. These items could be used for signalling air-sea rescue. Of secondary importance are water and food, e.g., the army rations.

A brief explanation is provided for the ranking of each item. These obviously do not represent all of the potential uses for the specified items but, rather, the primary importance of each.

1. **Shaving mirror**
   Critical for signalling air-sea rescue.

2. **Two-gallon can of oil-gas mixture**
   Critical for signalling - the oil-gas mixture will float on the water and could be ignited with a dollar bill and a match (obviously, outside the raft).

3. **Five-gallon can of water**
   Necessary to replenish loss by perspiring, etc.

4. **One case of army rations**
   Provides basic food intake.

5. **Twenty square feet of opaque plastic**
   Used to collect rain water, provide shelter from the elements.

6. **Two boxes of chocolate bars**
   A reserve food supply.

7. **Fishing kit**
   Ranked lower than the chocolate bars because “a bird in the hand is worth two in the bush”. There is no assurance that you will catch any fish.

8. **Fifteen feet of nylon rope**
   May be used to lash equipment together to prevent it from falling overboard.

9. **Floating seat cushion**
   If someone fell overboard, it could function as a life preserver.

10. **Shark repellent**
    Obvious.
11. **One quart of 160-proof Puerto Rican rum**
Contains 80 percent alcohol - enough to use as a potential antiseptic for any injuries sustained; of little value otherwise; will cause dehydration if ingested.

12. **Small transistor radio**
Of little value since there is no transmitter (unfortunately, you are out of range of your favourite AM radio stations).

13. **Maps of the Pacific Ocean**
Worthless without additional navigational equipment - it does not really matter where you are but where the rescuers are.

14. **Mosquito netting**
There are no mosquitoes in the mid Pacific.

15. **Sextant**
Without tables and a chronometer, relatively useless.

The basic rationale for ranking signalling devices above life-sustaining items (food and water) is that without signalling devices there is almost no chance of being spotted and rescued. Furthermore, most rescues occur during the first thirty-six hours, and one can survive without food and water during this period.
Train the Trainer: Adult Learning Principles

Office of the Minnesota Secretary of State
180 State Office Building
100 Rev. Dr. Martin Luther King Jr. Blvd
Saint Paul, MN 55155

Phone: (651) 215-1440
Toll Free: 1-877-600-8683
Minnesota Relay Service: 1-800-627-3529

Minnesota Secretary of State Website: http://www.sos.state.mn.us
**Objectives**

Using this guide, trainers will:

- Develop an understanding of learning styles and the trainer’s own style so that when creating a lesson plan, the trainer can design instructional activities to encompass all learning styles;
- Understand the difference between adult learners and child learners so that when developing a lesson plan, the trainer will select presentation methods which best fit the needs of the adult learner;
- Be able to develop a lesson plan to help structure the training;
- Understand assessment strategies so that during the training session, the trainer will be able to measure learner understanding, engage students in the learning process and encourage independent thinking.

Before proceeding, take a moment to answer the following questions about a learning experience you’ve had recently. (Note: This could be either a positive or negative experience.) Keep your answers in mind as you progress through this guide.

1. **Describe the learning environment. Was it hands-on or lecture? Off-site or on-site?**

2. **Was the trainer effective? Why or why not?**

3. **What could have been done to improve the training?**

4. **What helped you learn?**

5. **What could you have done to make the training session more beneficial for yourself?**
1.0 Election Judge Training Context

Minnesota Statutes 204B.25 gives the county auditor primary responsibility for providing training and certification for election judges, although election judge training duties may be assigned to the city and township clerks. Minnesota Rules 8240.1600 specifies the requirements of the election judge training course.

Minnesota Rules 8240.1600 Election Judge Training Course.

Subpart 1. Length. The election judge basic training course must be at least two hours long.

Subpart 2. Materials. The training authority shall provide examples of all forms which election judges must complete in the course of their duties; with examples of forms of identification acceptable for purposes of election day registration, including any forms of student identification issued by educational institutions in the area; and with the materials contemplated in the training plan. Additional materials may be provided by the training authority as the authority considers useful.

Subpart 3. Use of equipment. An electronic voting system or specimen paper ballot and ballot box must be used at each training session to familiarize each election judge with the voting procedures for the method of voting employed in the precinct where the judge will serve.

Subpart 4. Course content. A basic training course must include necessary information and skill development in the following areas:

A. how to use the training materials to find answers to questions arising in the polling place on election day;
B. preparations on election day before polls open;
C. judges’ duties during voting hours:
   (1) election day voter registration;
   (2) persons allowed in polling place;
   (3) challenge process;
   (4) voting process;
   (5) spoiled ballots;
   (6) assistance to disable voters; and
   (7) absentee ballots;
D. basic election judges’ duties after polls close;
E. new laws, rules, forms, and procedures;
F. major problems at prior elections; and
G. how to follow instructions from head election judge.

Statutory Authority: Minnesota Statutes 204B.25
2.0 Four Stages of Learning

Learning is a constant and life-long process. We are continuously taking in and assimilating information. There are many theories and models describing the learning process. One widely used model, developed by David Kolb, divides learning into four distinct yet mutually supportive stages. (University of British Columbia Learning Commons)

![Diagram of Four Stages of Learning]

- **Experiencing**: By having an experience (through a discussion with peers, reading an article, or taking on a responsibility), we begin to think about things differently.

- **Reflecting**: Experiences can prompt us to consider making changes. Reflecting might involve assessing our own behavior, evaluating our contribution to a particular situation, or speculating how our approach to a situation might be improved.

- **Theorizing**: Once we have gathered the necessary information about the experience, we are in a position to form generalizations or conclusions. Once we have reached a conclusion, we can create a strategy about our next steps.

- **Testing**: Finally, we can test our theories and see if they work. If they do, they become part of our knowledge or skills. If they do not, we either modify or completely discard them.

We all approach new information in different ways. Our preferred method is referred to as a ‘learning style.’
3.0 Learning Preferences

There are many different ways to understand how people prefer to learn, three are listed below.

Learning Styles

Kolb’s stages were applied to people’s learning styles by Peter Honey and Alan Mumford. These learning styles or preferences refer to ways a person naturally prefers to learn.

- **Activists** prefer to learn by doing, getting in and getting their hands dirty.
- **Reflectors** prefer to learn by observing and thinking.
- **Theorists** prefer to learn by understanding the theory behind the action.
- **Pragmatists** prefer to learn by seeing how the information will be put into practice in the real world.

It is important to remember they are not the only way they can learn, and people can improve their skills in each style. (Mobbs)

Visual-Auditory-Kinesthetic (VAK)

Another model that translates well for trainers in planning their activities is the Visual-Auditory-Kinesthetic (VAK) model. This model is based on our senses and places learners in three broad categories:

- **Visual** learners prefer looking, seeing and watching.
- **Auditory** learners prefer listening, hearing, and speaking.
- **Kinesthetic** learners prefer experiencing, moving, and doing.

As learners, we often will not fit exclusively into one style, but will use elements of all three. (Conner)

Multiple Intelligences

An expansion on the VAK model is the theory of multiple intelligences proposed by Howard Gardner. It expands the notion of “intelligence” beyond traditional academic notions, and includes eight abilities:

- **Musical**: sensitivity to sounds, rhythms, tones, and music
- **Visual-spatial**: spatial judgment and the ability to visualize with one’s mind
- **Verbal-linguistic**: facility with words and language
- **Logical-mathematical**: logic, reasoning, and numbers
- **Bodily-kinesthetic**: control of one’s bodily motions
- **Interpersonal**: sensitivity to others’ moods and motivations, and ability to work with others
- **Intrapersonal**: self-reflection and understanding of one’s own capabilities and limitations
- **Naturalistic**: relating information to natural surroundings (Wikipedia)

As a trainer, it is necessary to be aware of your own learning preferences because it will influence the way you design and conduct your training session. For example, if you plan a verbal lecture heavy on theory, learners who rely on reflective observation, or have a preference for visuals, may have a harder time learning the material. A questionnaire located in the Appendix will help you determine your preferred learning style.
4.0 Adult Learners and Child Learners Compared

Adults and children differ as learners. Differences include their conception of self; the experiences they have had; their orientation to learning; their readiness to learn, and their perspective of time. Important differences in each of these areas are listed below:

Table 1 Learner Characteristics of Adults and Children

<table>
<thead>
<tr>
<th>Learner Characteristic</th>
<th>Adults</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conception of Self</td>
<td>Need to validate the information based on their beliefs and values.</td>
<td>Accept the information being presented at face value.</td>
</tr>
<tr>
<td>Experience</td>
<td>Significant ability to serve as knowledgeable resource to the trainer and fellow learners.</td>
<td>Little ability to serve as knowledgeable resource to teacher or fellow students.</td>
</tr>
<tr>
<td>Orientation to Learning</td>
<td>Have substantial experience upon which to draw. May have fixed viewpoints</td>
<td>Have little or no experience upon which to draw, are relatively “blank slates”</td>
</tr>
<tr>
<td>Readiness to Learn</td>
<td>Decide for themselves what is important to be learned</td>
<td>Rely on others to decide what is important to be learned</td>
</tr>
<tr>
<td>Time Perspective</td>
<td>Expect what they are learning to be immediately useful</td>
<td>Expect what they are learning to be useful in their long-term future</td>
</tr>
</tbody>
</table>

(Edmunds, Lowe, Murray, & Seymour)
5.0. Keys to Adult Learning

The five areas examined in the preceding section provide helpful categories for the following key points about adult learners.

Concept of Self

- **Roles**: Have many roles and do not see themselves as learners.
- **Education**: Have wealth of experience that may influence self-perception.
- **Peer Group**: Influenced by peers and do not want to look foolish.
- **Participant/Trainer Relationship**: Should be one of mutual respect and trust. A partnership.

Experience

- **Previous Experience**: Will color any new concept introduced. Will influence reception of new information.
- **Education**: Have wealth of experience that may influence learning.

Orientation to Learning

- **Fear of Change**: Are more conservative and cautious by nature. Have a tendency to justify the “rightness” of their opinions.
- **Prejudices**: Influenced by pre-conceptions.
- **Loss of Sense of Discovery**: Diminishing sense of curiosity. Need right environment and motivation to regain it.

Readiness to Learn

- **Ability to Learn**: Willingness to learn is not related to their ability to learn.
- **Incentives**: Need motivation or enticement to learn.
- **Humor**: learn more when relaxed.
- **Pain and Pleasure**: Do things to avoid pain and receive pleasure.
- **Risk Averse**: Less willing to give up a behavior if it has worked for them in the past.

Time Perspective

- **Time**: Many responsibilities and more choices of how to spend free time means time spent learning must be a worthwhile and cost-effective investment.
- **Attention Span**: Have short attention span of about 20 minutes.
- **User-Urgent and User-Relevant**: More prepared to learn when they see immediate use for what they are learning, and it affects their success.

Keep these keys in mind as you prepare your training session. A helpful tool as you organize your session is a lesson plan.
6.0 Lesson Plans

Just as a traveler needs a map, a trainer needs a lesson plan. Lesson plans enable you to see not only your final destination (knowledgeable, competent election judges), but also the locations you need to journey through in order to get there (new laws, judges duties, voting processes, etc.).

A lesson plan answers three basic questions:

- *What* (do you want your students to learn)?
- *Why* (should they learn this materials)?
- *How* (should they learn it)?

The following is a basic lesson plan template:

**Lesson Title**

**Content:**

**Objectives:**

**Materials:**

**Introduction:**

**Presentation:**

**Practice:**

**Evaluation:**

**Lesson Plan Elements Explained:**

**Content:** The topic the lesson will be about.

**Objectives:** Specify the new skill that learners will gain as a result of the lesson. They focus on learner behavior. They are specific, observable and measurable.

**Materials:** Supplies and equipment needed to conduct the lesson; an items checklist.

**Introduction:** Preamble of the lesson. It provokes interest and motivates the learners.

**Presentation:** Introduce new information. Methods include:

- Lecture
- Demonstration
- Video
- Discussion
- Question and answer sessions
- Case studies
- Group problems
- Games

**Practice:** Opportunity to use new information and/or skills.

**Evaluation:** Informal or formal assessment of learner understanding of knew knowledge or skill in order to determine whether the objectives have been met. (Beery)

**An Element In-Depth: Objectives**

Creating quality objectives is like equipping yourself with a good compass. With your map (lesson plan) in hand, your compass (objectives) will keep you focused and headed in the right direction.

Do you want to create quality objectives? Just remember your ABC&Ds!

- **Audience:** Who are your learners?
- **Behavior:** What do you expect them to be able to do?
- **Condition:** Within what type of environment will the learning occur?
Degree: Is there a specific set of criteria that should be met? Is complete mastery required?

Objectives are tied to the evaluation portion of the lesson plan. The evaluation should assess whether the learners met the objectives. (Bixler)

An example of an election judge training lesson plan, including objectives, is provided below:

**Example Lesson Plan for an Election Judge Training Session**

**Lesson Title:** Election Judge Training

**Content:** See M.R. 8240.1600, Subp. 4. Course content

**Objectives:** Participants will understand new laws, rules, forms and procedures, and where to find the information so that when questions arise in the polling place, they will be able to answer accurately.

Participants will demonstrate that they can effectively perform judges’ duties on Election Day before, during and after hours.

**Materials:**

<table>
<thead>
<tr>
<th>Election Judge Guide</th>
<th>Laptop</th>
<th>Evaluation Forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training Power Point</td>
<td>Pencils/Pens</td>
<td>Certificates of Completion</td>
</tr>
<tr>
<td>presentation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Election Judge Training</td>
<td>Sample Ballots</td>
<td></td>
</tr>
<tr>
<td>DVD/video</td>
<td>Precinct Supply Box</td>
<td></td>
</tr>
</tbody>
</table>

**Introduction:** Introduce self and fellow trainers. Address housekeeping concerns. Give synopsis of training session. Engage in icebreaker activity.

**Presentation:** Present content in blocks, utilizing DVD and Power Point when applicable.

- **Block One:** Brief summary of new laws. How to use training materials on election day to find answers to voter questions.
- **Block Two:** Election day preparation before polls open, incorporating new laws and rules, forms and procedures.
- **Block Three:** Duties during voting hours, incorporating new laws and rules, forms and procedures.
- **Block Four:** Major problems and other issues at prior elections.
- **Block Five:** Chain of command; How to address questions unable to answer at polling place.

**Practice:** Engage in activity or questions/answer session after each block. After all blocks are complete, engage in election day simulation.

**Evaluation:** Review performance during Election Day simulation. Engage in final question and answer session. Distribute evaluation form; complete evaluation. Wrap up- last questions, future communication, etc. Distribute certificates.
7.0 Incorporating Learning Styles & Keys into a Lesson Plan

As you begin to draft your lesson plan, ways to address the preferences of different learning styles and be mindful of the keys to adult learners will become apparent.

Elements of a lesson plan are listed below, along with some helpful hits for incorporating the different styles and keys:

**Content:** Remember to focus on information that is urgent and relevant.

**Objectives:** Be specific in the goals of the session and cognizant of the short time allotted for the training sessions.

**Materials:** Use a variety of supplies – power point presentations, whiteboards, DVDs/videos – to appeal to all learning styles.

**Introduction:** This is your opportunity to build a positive relationship with your learners and establish a safe, mutually supportive learning environment. You can set the tone for the session, pique their interest, and explain how the information to follow will be immediately useful.

**Presentation:** Be aware of short attention-spans. Keep things moving! Use different delivery options (different format, different presenter) to appeal to multiple learning styles. Remember, laughter goes a long way. Ask questions. Questions keep learners actively engaged and allow them to demonstrate newly gained knowledge and prior experience. Questions can also help you measure success of the lesson’s objectives.

**Practice:** Allow learners to put new information and skills to use through simulation activities. Activities demonstrate the usefulness and relevancy of new information. Practice especially benefits tactile/kinesthetic learners.

**Evaluation:** An assessment of some type requires learners to be responsible for their own learning. Whether formal (written survey or test) or informal (observation), learners are able to demonstrate what they have learned during the session and also provide feedback to the trainer.
8.0 Gauging Learner Understanding

As you present the content of the training session, how can you be sure the learners are doing just that—learning? In the preceding section, the use of questions during the presentation portion of the lesson was briefly discussed. Asking questions is one method available for determining learner understanding.

Questions play an important part in a training session for both trainers and learners. On one hand, they help you, the trainer, determine the needs and expectations of your audience, and allow you to reinforce critical learning points. On the other hand, questions help learners stay engaged and actively participate in the session.

When employed properly, questions can help you gauge learner comprehension.

Questioning Strategies

The key to getting the most out of your questions is to use them effectively. It is not what you ask; it is how you ask it. Remember to give adequate time for a response, even if it feels uncomfortable. This increases the likelihood that your question will generate an answer. (Consider offering an incentive—chocolate anyone?—for those who answer a question.)

Use ‘probing’ rather than simple ‘yes or no’ questions. Seek information from your learners. Ask follow up questions to encourage participants to expand, clarify, or justify their answers. If you are limited in training time, ask polling questions which require participants to raise their hand rather than verbalize a response.

As you formulate questions, consider the objectives of your lesson plan, and use your questions to reinforce them. The questions you ask helps your audience see what topics you consider important.

Questions also help prepare your learners for another means of measuring learning understanding: the final assessment or evaluation.

Assessments/Evaluations

An assessment is how you definitively know your learners have met your learning objectives. It also helps you improve the learning experience by illustrating subject areas that are not quite clear to your learners.

Assessments general fall within two categories:

- Formative assessment: This is used during the presentation to determine how well your learners understand the materials as they are presented. You check for comprehension and use feedback to immediately adjust the training session.
- Summative assessment: This is a final cumulative test which evaluates what the learner has learned during the course. It assists the educator in determining whether the lesson objectives have been met.

There are multiple methods of assessment that can be used during a training session and at its conclusion. Four different types and brief descriptions are listed below:

- Formal assessment: Structured and recorded testing.
- Informal assessment: Observing learner performance in normal training session conditions.
- Peer-assessment: Fellow participants provide feedback to each other about their learning.
- Self-assessment: learner evaluates their own learning experience.

The best way to decide how to evaluate learner achievement is to make sure you identify what you want the participants to know, and what evidence you need to demonstrate this knowledge. (These elements are in your lesson plan objectives.)

The most common evaluation tool used in work-related presentations is the post-session evaluation. An evaluation generally consists of a combination of multiple choice questions and open-ended questions that require a written response. A sample evaluation is included in the Appendix.
9.0 Conclusion
This guide briefly explores concepts to consider as you prepare to train your election judges. What you see is only the first step of the journey; this introduction is meant to simply get you on the road.

After reviewing these materials, you should have a greater awareness of learning styles; keys to adult learning; the elements of a lesson plan; and methods to measure learner understanding.

As you prepare for the training session, remember:

“Tell me and I forget, teach me and I may remember, involve me and I will learn.”

-Benjamin Franklin-
Appendix

Minnesota Statutes section 204B.25 Training for Election Judges.

Subd. 1 Duties of county auditor. Each county auditor shall provide training for all election judges who are appointed to serve at any election to be held in the county. The county auditor shall also provide a procedure for emergency training of election judges elected to fill vacancies. The county auditor may delegate to a municipal election official the duty to provide training of election judges in that municipality or school district.

Subd. 2 Rules of secretary of state. The secretary of state shall adopt rules establishing programs for the training of county auditors, local election officials, and election judges by county auditors as required by this section.

Subd. 3 Trained election judges; number required. Each election precinct in which less than 100 individuals voted at the last state general election shall have at least two election judges who are members of different major political parties who have received training as required in this section. In every one election precinct, no individual may serve as an election judge who has not received training as required by subdivision 1.

Subd. 4 Training for local election officials. At least once every two years, the county auditor shall conduct training sessions for the municipal and school district clerks in the county. The training sessions must be conducted in the manner provided by the secretary of state. No local election official may administer an election without receiving training from the county auditor.
What’s Your Learning Style?

Learning styles refer to the ways you prefer to approach new information. Each of us learns and processes in our own special ways, though we share some learning patterns, preferences, and approaches. Knowing your own style also can help you to realize that other people may approach the same situation in a different way from your own.

Take a few minutes and complete the following questionnaire to assess your preferred learning style. Begin by reading the words in the left-hand column. Of the three responses to the right, circle the one that best characterizes you, answering as honestly as possible with the description that applies to you right now. Count the number of circled items and write your total at the bottom of each column. The questions you prefer provide insight into how you learn.

<table>
<thead>
<tr>
<th>Questions</th>
<th>Possible Response A</th>
<th>Possible Response B</th>
<th>Possible Response C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When I try to concentrate…</td>
<td>I grow distracted by clutter or movement, and I notice things around me other people don’t notice.</td>
<td>I get distracted by sounds and I attempt to control the amount and type of noise around me.</td>
<td>I become distracted by commotion and tend to retreat inside myself.</td>
</tr>
<tr>
<td>2. When I visualize…</td>
<td>I see vivid, detailed pictures in my thoughts.</td>
<td>I think in voices and sounds.</td>
<td>I see images in my thoughts that involve movement.</td>
</tr>
<tr>
<td>3. When I talk to with others…</td>
<td>I find it difficult to listen for very long.</td>
<td>I enjoy listening, or I get impatient to talk myself.</td>
<td>I prefer to interact while walking or participating in some activity.</td>
</tr>
<tr>
<td>4. When I contact people…</td>
<td>I prefer face-to-face meetings.</td>
<td>I prefer speaking by telephone for serious conversations.</td>
<td>I prefer to interact while walking or participating in some activity.</td>
</tr>
<tr>
<td>5. When I see an acquaintance…</td>
<td>I forget names but remember faces.</td>
<td>I know people’s names and I can usually quote what we discussed.</td>
<td>I remember what we did together and I may almost “feel” our time together.</td>
</tr>
<tr>
<td>6. When I relax…</td>
<td>I watch TV, see a play, visit an exhibit, or go to a movie.</td>
<td>I listen to the radio, play music, read, or talk with a friend.</td>
<td>I play sports, make crafts, or building something with my hands.</td>
</tr>
<tr>
<td>7. When I read…</td>
<td>I like descriptive examples and I may pause to imagine the scene.</td>
<td>I enjoy the narrative most and I can almost “hear” the character talk.</td>
<td>I prefer action-oriented stories, but I do not often read for pleasure.</td>
</tr>
<tr>
<td>8. When I spell…</td>
<td>I envision the word in my mind or imagine what the word looks like when written.</td>
<td>I sound out the word, sometimes aloud and tend to recall rules about letter order.</td>
<td>I get a feel for the word by writing it out or pretending to type it out.</td>
</tr>
<tr>
<td>9. When I do something new…</td>
<td>I seek out demonstrations, pictures, and diagrams.</td>
<td>I want verbal and written instructions, and to talk it over with someone else.</td>
<td>I jump right in to try it, keep trying, and try different approaches.</td>
</tr>
<tr>
<td>10. When I assemble an object…</td>
<td>I look at the picture first and then, maybe, read the directions.</td>
<td>I read the directions, or I talk aloud as I work.</td>
<td>I usually ignore the directions and figure it out as I go along.</td>
</tr>
<tr>
<td>11. When I interpret someone’s mood…</td>
<td>I examine facial expressions.</td>
<td>I rely on listening to tone of voice.</td>
<td>I focus on body language.</td>
</tr>
<tr>
<td>12. When I teach other people…</td>
<td>I show them.</td>
<td>I tell them, write it out, or I ask them a series of questions.</td>
<td>I demonstrate how it is done and then ask them to try.</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>Visual:_______</td>
<td>Auditory:_______</td>
<td>Tactile/Kinesthetic:______</td>
</tr>
</tbody>
</table>

Table 2 What’s Your Learning Style? © Marcia Conner, 1993-2013. All rights reserved. http://marciaconner.com/assess/learningstyle/
The column with the highest total represents your primary processing style. The column with the second-most choices is your secondary style.

Your primary learning style: ____________
Your secondary learning style: ____________

Now that you know which learning style you rely on, you can boost your learning potential when working to learn more. For instance, the following suggestions can help you get more from reading a book.

- If your primary learning style is **visual**, draw pictures in the margins, look at the graphics, and read the text that explains the graphics. Envision the topic or play a movie in your thoughts of how you’ll act out the subject matter.
- If your primary learning style is **auditory**, listen to the words you read. Try to develop an internal conversation between you and the text. Don’t be embarrassed to read aloud or talk through the information.
- If your primary learning style is **tactile/kinesthetic**, use a pencil or highlighter pen to mark passages that are meaningful to you. Take notes, transferring the information you read to the margins of the book, into your journal, or onto a computer. Doodle whatever comes to mind as you read. Hold the book in your hands instead of placing it on a table. Walk around as you read. Feel the words and ideas. Get busy – both mentally and physically.

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Evaluation

To help make this course more effective, please complete this evaluation.

Course Title (Required)_____________________________________________ Date (Required)________________

On a scale from 1 (disagree) to 4 (agree), please rate the statements below:

____ 1. The materials were presented at a pace that was effective and easy to comprehend.
____ 2. The trainer was knowledgeable about the topic.
____ 3. The training materials were logically organized and easy to follow.
____ 4. The trainer used effective examples and/or stories to illustrate points.
____ 5. The manuals and handouts were complete and accurate.
____ 6. The content of the course was relevant to my job.
____ 7. The manuals and handouts communicated information that will help me perform my job duties.
____ 8. The course objectives were clear to me and were met.
____ 9. The length of the course was appropriate.
____ 10. I plan to apply what I’ve learned in this course to my job.
____ 11. Overall, I was satisfied with this course.

On a scale from 1 (low) to 10 (high), please indicate your knowledge of and skill with election judge duties and applicable election law:

Before the Course____

After the Course____

What was most useful or meaningful about the training session?

What was least useful or meaningful about the training?

What are you going to do differently as a result of training?

Additional Comments:

Your Name (Optional) ________________________________________________
Sources


http://marciaconner.com/assess/learningstyle/

https://www.ncjrs.gov/ovc_archives/educator/welcome.html

http://www2.le.ac.uk/departments/gradschool/training/eresources/teaching/theories/honey-mumford

http://learningcommons.ubc.ca/tutoring-studying/the-learning-process/

Process and content of continuing learning for judicial officers

John Goldring

This paper concentrates on continuing learning by judicial officers after their appointment and any induction, which are the subject of other papers given at this session. Most of the content of this paper is based on material contained in Livingston Armytage’s invaluable educating judges: Towards a New Model of Continuing Judicial Learning, which was written while the author was Education Director of the Judicial Commission of NSW, and draws on that Commission’s resources. I do not necessarily agree with all the conclusions, but this book contains a wealth of material and references.

This paper assumes that judicial officers have been appointed on the basis of their knowledge, not only of law, practice and procedure, but that they also have a basic understanding of how to carry out their functions in and out of the courtroom or hearing room. The latter assumption may not always be justified, because many judicial officers, on appointment are exposed to, and need to understand, an area of practice with which, experienced though they are, they are totally unfamiliar. However, for the purposes of this paper I assume that all judicial officers have that basic level of competence and knowledge.

My background may help to explain my perspective. I was appointed to the bench after a career, not at the Bar, but in legal education and law reform. For most of the 15 years before my appointment, I had held a position of dean of a law faculty or equivalent. These days a dean is as much a manager as a teacher or scholar, and faces a daily task of allocating and managing scarce resources and dealing with interpersonal relationships. So my comments reflect the experience of someone who has been both a professional educator and a manager of a medium-size enterprise. These perspectives, I think, are unusual for a judicial officer. However, they have enabled me to develop some insights into both how adults learn and what makes an organisation efficient, in the sense that it is able to perform, as well as resources allow, its proper functions.

Why?

The AIJA was established because a number of people, including a significant number of judicial officers, saw a need to provide resources which would, among other things, enable courts and tribunals to perform their functions better. In NSW, since the mid-1980s, the Judicial Commission has provided significant resources for training and support for judicial officers. It has also conducted “needs analyses” of judicial officers in the State. In the UK there is a Judicial Studies Board, and in the United States and Canada long-established institutions that include training of judicial officers among their

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2 L. Armytage, Educating Judges: Towards a New Model of Continuing Judicial Learning, Ch 4, esp. 85 ff.
functions. All these developments recognise that judicial officers need support and training. This fact was not admitted for many years, but it seems now to be accepted. Education for judicial officers is seen as enhancing judicial independence and accountability, and not as inconsistent with it.

**Professional competence**

While there has been much discussion about what constitutes “professional competence”, I assume for the purpose of this paper that, for judicial officers, it is a mixture of skill (or “art”) and knowledge, including the following:

- Legal knowledge
- Courtroom technique
- Management technique
- New awareness
- Technology

**Legal knowledge**

Legal knowledge is a prime requirement of judicial officers. Like any professional, a competent judicial officer will wish to be up to date with developments, if not in the vast area of the law as a whole, at least with the most recent legislation and cases affecting the jurisdiction in which he or she works. Judicial officers will have acquired a good deal of legal knowledge well before their appointment. However, on appointment, they may move to a new area in which they need to learn a great deal quickly. In addition, legislative changes also require judicial officers to come to terms rapidly with significant quantities of material, for example, the *Evidence Act* 1995 and the recent changes in the law and procedure in NSW governing appeals from magistrates to higher courts.

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4. Armytage, Ch 1.
7. For a working definition of appropriate competency standards, see A Gonczi et al, *Establishing Competency-based Standards in the Professions*, National Office of Overseas Skills Recognition, Commonwealth Department of Employment, Education and Training, Research Paper No 1, AGPS, Canberra, 1990. The standards mentioned in this publication are not specific to any profession. The following definition is taken from the 'Executive Summary':

2. A competent professional can be defined as a person who has the attributes necessary for job performance at the appropriate standard. This definition focuses on three elements: attributes, performance, and standards. Attributes such as knowledge, skills and attitudes, in combination, underlie competence… Thus a competency-based standard is a level of achievement required for some area of professional practice…”

Courtroom technique

Many judicial officers have to learn new skills in order to deal with developments in procedure, for example, taking evidence from children by video link and from witnesses in foreign countries by teleconference link. These skills are not difficult, and the need for them is rather obvious.

There are other communication skills where, it seems, some judges at least need to develop new understanding, for example of the difficulties in communication faced by litigants who are immigrants or who have disabilities, and of ways in which those difficulties may be overcome. Some practitioners are knowledgeable about these matters and can take a lead in introducing new techniques, but in many cases practitioners also lack this understanding, and it is appropriate for judicial officers to take a lead.

Management technique

There is now a great deal of literature on case management technique. All judicial officers will need to be able to deal with one or more forms of case management, as there would be very few courts or tribunals that now do not employ these. The systems vary from court to court, but it is reasonable to expect that each court will make its judicial officers familiar with the particular system it uses, and that induction programs for judicial officers will introduce some basic concepts of case management. It is probably more important for the registrars and their staff who manage the filing of documents to understand these principles more fully, but all judicial officers must have some basic understanding of the operation of the system used in the jurisdiction in which he or she works, and the reasons why case management, and the particular variant are used. In some courts, such as the Federal Court of Australia, judicial officers are allocated a “docket” of cases and are expected to manage them and this seems to be a growing trend. Judicial officers may be required to take on responsibility for special lists or regional courts. If so, they may need much more awareness of the theory and practice of case management. All judicial officers need the foundation of this understanding.

New awareness

Cultural and gender awareness are both subjects about which, in a real sense, there was no awareness 30 years ago. It is now accepted that it is no longer acceptable for judicial officers to be insensitive to issues that may arise out of, or involving, gender or cultural differences. Though there has been some resistance by judicial officers to some programs designed to increase awareness of gender and cultural differences and their impacts on the operation of the legal system, education in these matters is now considered appropriate for judicial officers in a multicultural society.

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8 There is a substantial literature on case management, particularly in the Journal of Judicial Administration. However, my guess is that very few judicial officers have more than a passing knowledge of this literature.

Technology

These days judicial officers need to be familiar with modern information technology. It is rarer for barristers and solicitors to be able to survive in practice today without basic computer skills, as these are required not only for information retrieval and word processing, but also, in many cases for such matters as keeping a diary. E-mail has become a vital means of communication, even within court systems. Some judicial officers may be able to rely on associates to deal with e-mail and conduct research using the vast array of legal information that is now available electronically. Relevant statistical material (e.g. sentencing statistics) is available, often only in electronic form. Many courts are moving towards electronic document lodgment and electronic real-time transcripts.

Efficiency

Whether or not judicial officers think “efficiency” is a concept that should be applied to the judicial process, others - principally Treasury officials and politicians - do, and most judicial officers would, I suspect, find their work both easier and more satisfying if frustrating inefficiencies were removed. Case management is but one way in which bureaucrats and their political overlords expect courts and tribunals to show greater signs of efficiency. Restrictions on jury trial, such as those currently proposed in England and Wales, are another. The prevailing ideology of economic rationalism and outcome-measurement are such that if the courts do not take measures to be more efficient, they will find that their resources are reduced, or more ominously, that rules and procedures designed to protect the rights of litigants and the interests of justice will be removed by the political process.

It is always possible for courts to be more efficient without sacrificing the interests of justice. For this purpose, I take “efficiency” to mean the effective use of the resources available. This does not mean that judicial officers (including tribunal members) should be given a “darg” or quota of cases to be dealt with in a given time, for that would ignore the significant differences between individual cases. What it means is that time is not wasted, and that no unnecessary process is undertaken.

In a system so bound by tradition as the common law, there are clearly instances in which time is wasted and things are done that are not necessary, and sometimes not desirable. Judicial officers become aware of these. By their very nature, judicial officers are not political activists, and cannot venture to suggest change unless they are able to produce a solution which eliminates the inefficiencies without sacrificing the interests of justice. Case management systems are designed for this purpose, and sometimes achieve it. Good skills of communication between the bench and the advocates may achieve as much. In either case, and in the case of other ways of working more efficiently, judicial officers may need to learn about new technology, new techniques (for example, of finding out why the inefficiencies arise), or what others faced with similar problems have done.

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Feedback on judicial performance: the reflective judge: oxymoron or tautology?

A distinguishing characteristic of a “professional,” is that, ideally, such a person has developed the capacity for independent learning. Donald Schoen, who was not an educational theorist, but an urban planner and teacher of that subject, has introduced the concept of the “reflective practitioner”, a concept which now figures in the thinking of good professional educators. This concept (like most good theories) is, as John Cleese would say, “a statement of the bleeding obvious”. A good professional is a person who has acquired significant knowledge and skill (or “art”) relevant to a particular area, and who has developed the technique of learning continuously from his or her experience, and thus is able to solve problems which arise in complex, messy situations. This learning technique involves incorporation, into the process of reflection, of relevant knowledge of which the professional has become aware, whether by professional practice, reading, professional discussions, or casual conversations. It is possible to be reflective on one’s own, but constructive feedback from someone else helps greatly.

Judicial officers are almost unique in the paucity of feedback they receive on their professional performance. Virtually all they receive are notices of appeal from their decision, and then, if a litigant has the resources and will to pursue the appeal, in the long run, a copy of the decisions of the appeal court. That feedback is sporadic and haphazard, and when received it is directed, quite properly, not so much to improving the performance of the judicial officer, as to getting the right result for the litigants. It corrects legal reasoning, probably the aspect of judicial work in respect of which judicial officers require least feedback. While the system of appeal is significant in making judicial officers accountable, it is singularly ill-fitted to provide constructive feedback to judicial officers. Most other professionals have means of receiving feedback, either formally, through performance appraisals, re-accreditation procedures, or through other formal or informal types of peer review.

Many widely-used types of performance appraisal are, or might be seen to be, inconsistent with traditional notions of judicial independence. The peer review common at the Bar is very informal: barristers whose performance is inadequate learn to see deficiencies when they cease receiving briefs or their colleagues in chambers drop hints. It is, however, something. Judicial officers are not subject to any market pressures and relatively little peer pressure. Because, for the most part, they operate as individual decision-makers, their peers do not observe them operating in a professional capacity, and are not in a position to provide feedback.

Personally, lack of this type of feedback has been one of the most difficult things for me to adapt to on the bench. As I do not come from a traditional professional background at the Bar, I am perhaps more than usually keen to ascertain whether or not I am performing my judicial functions effectively and efficiently. This evaluation is not readily measured without clear criteria for performance. It would not be acceptable for most judicial officers to be subject to the type of performance criteria used for this type of evaluation in other professions or vocations, because these would clearly interfere with

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the function of the judicial officer in deciding cases according to law. It is my view, nevertheless, that any professional person needs to understand how effective he or she is in performing his or her professional function. Like any competent professional, the judicial officer on his or her own will formulate some criteria for professional self-evaluation, but may need some assistance in formulating these criteria and also in determining whether he or she has met those criteria.

**What?**

**Keeping up to date - new developments**

The needs surveys of judicial officers rate highly the need to “keep abreast” of developments, especially legislation and appellate court decisions. This can be done in several ways.

**New technology**

Where new technology becomes available (for example, on-line access to sentencing statistics or comparable verdicts in civil cases, voice-recognition software that enables dictation direct to disk), some judicial officers are keen to learn how to use the technology.

**Management?**

Most judicial officers have no formal training in management when they are appointed and few have any experience of management of anything other than a one-person practice. Those who are placed in charge of a court, region, or special list, may need to learn management skills appropriate to their task.

**Current awareness/social change**

I have already mentioned the perceived need for judicial officers to become aware of the consequences of differences in gender and culture. However, other areas of social change may be appropriate subjects for judicial sentencing options. Information may become available about, for example, the effectiveness and appropriateness of various sentencing options in relation to different types of offender. Experts in particular areas such as mental illness, developmental problems, or disabilities may be able to provide useful information to judicial officers who encounter the need to deal with accused people or witnesses (and, it must be said, colleagues) who are afflicted with such problems.

**How?**

**Characteristics of judicial officers as learners**

The first important characteristic of judicial officers as learners is that they are exceptionally busy people. The very techniques that have made courts more efficient have done so by ensuring that available judicial officers are actually sitting as much as possible. Time for individual learning is much easier to find than time when several judicial officers are available at the same time.
Armytage, who is familiar with the educational research on how people learn, has indicated that, because of the way they are appointed, and their own perceptions of the need to maintain independence, judicial officers have particular characteristics as learners. The differences from other highly educated adult learners may not be so great, however.

The achievements required of judicial officers before they are appointed mean that they will all have had a fairly intensive tertiary level education, and will then have made the transition from the passive learning which was, at least until recently, the norm in most Australian Universities, to the role of independent, self-motivated and self directed, active adult learner which characterises professionals.

This process may be changing, as most Australian universities now see their role differently. Previously, they (and the professions for which they provided training) often saw their role as inculcating defined bodies of skill and knowledge into students who, immediately prior to entering university, had already been the recipients of discrete bodies of knowledge in the course of their secondary education. Now they see that role as primarily equipping students for lifelong learning by developing their capacity for critical reflection and independent learning.

When faced with the prospect of “education”, most adult learners, however, still tend to think of the learning experience as that which was typical of universities when they were students. They may not be aware that the agenda of some universities (sometimes overt, sometimes hidden) and the inevitable effect of a professional life is to bring about the transformation from passive to active knowledge acquisition. Many are simply not aware that, as conscientious professionals, they are already engaged in continuing education.

Some formal learning activities, such as “continuing professional education” seminars, lecture series, and addresses at workshops, conferences and professional associations can be important sources of new information and new skills. I have, over the years, noticed an attitude among legal professionals that they do not need any formal continuing education. They resent both the idea that they need it, and especially the notion that continuing education should be mandatory.

For most professional people, however, formal activities are a minor part of continuing professional education. Most of their learning occurs when they read professional literature, research individual specific problems, and discuss their work with peers informally.

Armytage, after reviewing the literature, concludes that continuing judicial education should be a “voluntary, independent and judge-led process” and that it should “facilitate individualized learning which is self-directed and critically reflective, and accommodate the distinctive styles in which judges prefer to learn and practice.” This is probably another statement of the bleeding obvious. It is also a statement of what most

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12 Ch 6.
13 PC Candy et al., Developing Lifelong Learners Through Undergraduate Education, AGPS, Canberra, 1994.
14 J W Nelson, A Study of the Continuing Legal Education Needs of Beginning Solicitor, Sydney, Centre for Legal Education.,
15 p. 151.
16 p. 152.
judicial officers actually do, and what, in the contemporary jargon, constitutes “best practice”, even though the judicial officers may not recognise it as continuing education. If the process by which judges in fact learn is labelled (possibly re-labelled) “continuing judicial education”, it will both dispel suggestions that judicial officers are neither accountable nor professional in their approach, and also remove some of the fears of judicial officers either that they do not need continuing education or that any formal program of continuing education will interfere in some way with their judicial independence.

**Appropriate vehicles for continuing learning**

Once there is some certainty about the nature and characteristics of judicial officers as learners, some thought can be given to the methods that can be used to help judicial officers learn. Most of them are familiar. Some require group activities, but many do not.

**Conferences and courses**

Formal conferences and courses are regarded very highly by most judicial officers, if the NSW Judicial Commission user surveys reported by Armytage are any indication. They provide not only information and insight on knowledge and skills, but also a degree of collegial contact at a number of levels for people engaged in what is generally a fairly solitary professional life. Academics often report that the most valuable part of conferences is not the formal presentations, but the informal exchange of ideas and information that takes place over meals, coffee or stronger drinks. My experience is that this is equally true of meetings of judicial officers.

The problem about formal conferences or courses is that they need presenters who are interesting and acceptable. Judicial officers, by and large, feel that they deserve presenters who are acknowledged experts in their fields. In some areas - especially practical areas of law such as criminal law, torts and defamation - in general, to the judicial officers who arrange conference programs, only other judicial officers or leading academics appear acceptable as presenters - a point to which I shall return. Often these people, though highly skilled and knowledgable in their areas, either know little about how people learn, or appreciate that presentation of a conference paper for best effect requires skills different from those of a jury advocate or a university lecturer of the 60s. There are, of course, exceptions.

Justice David Levine’s presentation to the last NSW District Court Judges’ conference on defamation law and practice, for example, was a model conference presentation: a solid paper containing detailed information, a presentation using appropriate audio-visual teaching aids (slides, overheads, art work, film and video clips). It was a classic performance which both inspired and informed, and offered a learning experience far beyond most formal educational institutions.

Other examples do not necessarily involve judges. Academics are not necessarily “academic” in their approach, and some practitioners may be able to make presentations that do not focus on the narrowly practical (when that is not appropriate). The presentations by Professors Young and Chesterman on their research on juries at the 1999 National District and County Court Judges’ Conference are excellent examples. Reflective and critical judges will soon realise that while judicial officers have, collectively, a vast repository of relevant knowledge and experience, they do not have a
monopoly. Recently the Judicial Commission of NSW presented a seminar on identifying witnesses who tell lies. Many judges say they develop skills in this area through experience, and no doubt they do. However, in this case the presenter was a psychologist who had made a special study. It may have been my inexperience that convinced me of the value of the presentation, but I noticed some very experienced judicial officers who seemed to gain a lot from the seminar.

Where the learning opportunity is presented formally, care must be taken not only in the selection of the presenter, but also to ensure that that presenter, no matter how well informed, does not alienate the audience through inappropriate means of presentation. This point is linked to the points made earlier about the rather negative attitude of some professional people to the very notion of formal continuing education activities. Their conception is the narrow, formalistic concept of the “teacher-centred” learning which used to be typical of universities and secondary schools. They do not appreciate fully that formal continuing professional education is most successful, both from the perspective of the individuals and of the professional group collectively, when each participant contributes, and does not merely “soak” up information.

Educational studies establish that in many circumstances independent learners - a class that includes most adults - learn best when they are actively involved in the learning experience. Students in educational institutions invariably report that they learn more where they are actively involved, such as in problem-solving and group discussions. Clinical programs are remarkably successful in enabling students to learn, not only in the sense of gaining knowledge, but also in terms of developing attitudes and skills. Such learning experiences may be resource-intensive (ie costly), and they are certainly not the best way of conveying information. They are, however, important in developing “deep” as opposed to “shallow” learning.

The experience of many educators is that groups of professionals, especially judicial officers, are often reticent to engage in learning activities that differ from the traditional lectures, seminars and workshop discussions. Judicial officers are not as often resorted to by those who address gatherings of, say, judicial officers. However, once initial resistance is overcome, the value of these experiences is appreciated. Many participants at this conference may have experienced the session offered at the national Judicial Orientation Course, where the conference organisers tell the group that they have just landed at an airport in a foreign country, and that the next speaker is a government official. The leader of the discussion then addresses the group only in Bosnian, and distributes a form printed in that language. The members of the group are then taken through the form and the leader indicates (speaking only Bosnian until the exercise is completed) that they should fill it in. Most participants assume it is an immigration form and are quite shocked when they discover what they have actually agreed to in the form! The purpose of the exercise, of course, is to illustrate the difficulty that those who do not speak English have in filling in forms and dealing with officials in this country. No lecture could convey this so vividly.

Another advantage of learning environments that are participatory is that they maximise the use of the knowledge and experience of all members of the group, not just those of

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17 The distinction between “deep” and “shallow” learning has become important in understanding how and why people learn, and in selection of appropriate teaching methods. The subject is explored comprehensively in M Le Brun and R Johnstone, The Quiet Revolution, Sydney, LBC, 1994, especially at pp. 60-61.
the “lecturer”. Groups of judicial officers bring together a vast wealth of individual experience and knowledge which more often than not will enhance any contribution that can be made by an “imported” presenter.

Independent learning packages

While formal situations may provide an appropriate environment for some learning by judicial officers, most of that learning will necessarily be individual, self-directed learning by the judicial officers acting independently. The question then becomes “how can individual, self-directed learning by judicial officers be encouraged?”

Newsletter (“Judicial Officers Bulletin”, circulars)

The provision of information can assist judicial officers considerably. They are necessarily busy, and in many courts they are often on circuit without access to libraries and other resources. Some courthouses in NSW, for example, are not connected to the court computer network and also have telephone systems which make it impossible to dial up from chambers. Digests and summaries of recent legislation and decisions can be extremely useful. The Judicial Commission of NSW produces the Judicial Officers Bulletin each month. It is invaluable to a judge on criminal circuit.

E-mail and the Internet

The Internet and e-mail are potentially significant means of continuing judicial education. There are still some obstacles — physical obstacles such as the need for access in all courthouses and chambers, something that should soon be achieved — and a greater obstacle, which is the need for judicial officers to become computer literate.

What is required now?

What is now required is an acknowledgment by judicial officers that, if they are competent professionals, they are already engaged to some extent in continuing judicial education, and then to bring them into contact with the resources they need to make this education effective, systematic and continuing.

Needs analysis

Judicial officers need to identify and state clearly what they require to continue their learning. As, I hope, this paper has shown, many judicial officers are not familiar with much educational jargon and tend to be deterred by it. They are likely to be individual, self-reliant and self-directed learners. If they can be assisted to identify their learning pattern and the resources they need, they may make their lives easier by being more efficient and effective in their learning. There may be ways in which they can save time and increase the content of what they learn. To identify these needs and techniques probably requires more than a survey. It probably requires individual educators, working from a platform such as the AIJA or a Judicial Commission, to work with judicial officers.
Resource people

The AIJA and the NSW Judicial Commission have demonstrated that there are people who can provide at least some of the resources that judicial officers need for continuing learning. Desirable and qualified “judicial educators” may be difficult to find, as they will need to be aware of the likely characteristics of judicial officers as learners and to their approaches to learning. They must also be sensitive to judicial officers’ particular wants and attitudes and knowledgeable about the resources available to judicial officers.

Judicial officers themselves, particularly heads of jurisdiction and Chairs of Education Committees, may find that they become the initial resource people, especially in identifying the needs that judicial officers working with them may have. Institutions like the AIJA and the NSW Judicial Commission may help, but there are few skilled educators with the requisite knowledge, and little prospect that funds will be available to employ more, other than on a consulting basis. Perhaps the best assistance they can offer is in training a few judicial officers in each jurisdiction to be the resource people for that jurisdiction.

Many judicial officers are already identifying their own learning needs, and engaging in their own continuing professional education, so the additional task may not be too onerous.
Innovative Methods of Teaching

Dr. Damodharan V. S. ACCA, AICWA and Mr. Rengarajan.V AICWA

Abstract/ Purpose –The purpose of this paper is to evaluate the traditional methods of teaching as well as multimedia teaching and to suggest other useful teaching methods that can be attempted in imparting knowledge to the students. Basically teaching must include two major components sending and receiving information. Ultimately, a teacher tries his best to impart knowledge as the way he understood it. So, any communication methods that serve this purpose without destroying the objective could be considered as innovative methods of teaching. The use of innovative methods in educational institutions has the potential not only to improve education, but also to empower people, strengthen governance and galvanize the effort to achieve the human development goal for the country.

I. Introduction

Education is a light that shows the mankind the right direction to surge. The purpose of education is not just making a student literate but adds rationale thinking, knowledgeablity and self sufficiency. When there is a willingness to change, there is hope for progress in any field. Creativity can be developed and innovation benefits both students and teachers.
II. Importance of Education:

Islam attaches such great importance to knowledge and education. When the Qur'an began to be revealed, the first word of its first verse was 'Iqra' that is, read. Education is thus the starting point of every human activity. A scholar (alim) is accorded great respect in the hadith. According to a hadith the ink of the pen of a scholar is more precious than the blood of a martyr. The reason being that martyr is engaged in defense work while an alim (scholar) builds individuals and nations along positive lines. In this way he bestows a real life to the world.

“Education is the manifestation of perfection already in man” –

(Swami Vivekananda)

Education is a light that shows the mankind the right direction to surge. If education fails to inculcate self-discipline and commitment to achieve in the minds of student, it is not their fault. We have to convert education into a sport and learning process has to generate interest in the students and motivate them to stay back in the institution than to run away from it. Education should become a fun and thrill to them rather than burden and boredom. It is an integral part of their growth and helps them become good citizens.

Education is an engine for the growth and progress of any society. It not only imparts knowledge, skills and inculcates values, but is also responsible for building human capital which breeds, drives and sets technological innovation and economic growth. In today’s era, information and knowledge stand out as very important and critical input for growth and survival. Rather than looking at education simply as a means of achieving social upliftment, the society must view education also as an engine of advancement in an information era propelled by its wheels of knowledge and research leading to development.
III. Methodology

The traditional or innovative methods of teaching are critically examined, evaluated and some modifications in the delivery of knowledge is suggested. As such, the strengths and weaknesses of each teaching methodology are identified and probable modifications that can be included in traditional methods are suggested.

IV. Traditional Teaching Method – An evaluation

In the pre-technology education context, the teacher is the sender or the source, the educational material is the information or message, and the student is the receiver of the information. In terms of the delivery medium, the educator can deliver the message via the “chalk-and-talk” method and overhead projector (OHP) transparencies. This directed instruction model has its foundations embedded in the behavioral learning perspective (Skinner, 1938) and it is a popular technique, which has been used for decades as an educational strategy in all institutions of learning.

Basically, the teacher controls the instructional process, the content is delivered to the entire class and the teacher tends to emphasize factual knowledge. In other words, the teacher delivers the lecture content and the students listen to the lecture. Thus, the learning mode tends to be passive and the learners play little part in their learning process (Orlich et al., 1998). It has been found in most universities by many teachers and students that the conventional lecture approach in classroom is of limited effectiveness in both teaching and learning. In such a lecture students assume a purely passive role and their concentration fades off after 15-20 minutes.

Some limitations which may prevail in traditional teaching method are

- Teaching in classroom using chalk and talk is “one way flow” of information.
- Teachers often continuously talk for an hour without knowing students' response and feedback.
- The material presented is only based on lecturer notes and textbooks.
- Teaching and learning are concentrated on “plug and play” method rather than practical aspects.
- The handwriting of the lecturer decides the fate of the subject.
- There is insufficient interaction with students in classroom.
- More emphasis has been given on theory without any practical and real life time situations.
- Learning from memorization but not understanding.
- Marks rather than result oriented.

V. INNOVATIVE TOOLS

(A) MULTIMEDIA LEARNING PROCESS

I hear and I forget.
I see and I believe.
I do and I understand. - Confucius

Multimedia, is the combination of various digital media types such as text, images, audio and video, into an integrated multi-sensory interactive application or presentation to convey information to an audience. Traditional educational approaches have resulted in a mismatch between what is taught to the students and what the industry needs. As such, many institutions are moving towards problem-based learning as a solution to producing graduates who are creative; think critically and analytically, to solve problems. In this paper, we focus on using multimedia technology as an innovative teaching and learning strategy in a problem-based learning environment by giving the students a multimedia project to train them in this skill set.
Currently, many institutions are moving towards problem-based learning as a solution to producing graduates who are creative and can think critically, analytically, and solve problems. Since knowledge is no longer an end but a means to creating better problem solvers and encourage lifelong learning. Problem-based learning is becoming increasingly popular in educational institutions as a tool to address the inadequacies of traditional teaching. Since these traditional approaches do not encourage students to question what they have learnt or to associate with previously acquired knowledge (Teo & Wong, 2000), problem-based learning is seen as an innovative measure to encourage students to learn how to learn via real-life problems (Boud & Feletti, 1999).

The teacher uses multimedia to modify the contents of the material. It will help the teacher to represent in a more meaningful way, using different media elements. These media elements can be converted into digital form, modified and customized for the final presentation. By incorporating digital media elements into the project, the students are able to learn better since they use multiple sensory modalities, which would make them more motivated to pay more attention to the information presented and retain the information better.

Chart 1 - MULTIMEDIA ELEMENTS

Creating multimedia projects is both challenging and exciting. Fortunately, there are many multimedia technologies that are available for developers to create these innovative and interactive multimedia applications (Vaughan, 1998). These technologies include Adobe Photoshop and Premier to create/edit graphics and video files respectively, SoundForge and 3D Studio Max to create and/or edit sound and
animation files, respectively. They can also use an authoring tool such as *Macromedia Director* or *Authorware* to integrate and synchronise all these media elements into one final application, add interactive features, and package the application into a distributable format for the end-user.

Another advantage of creating multimedia projects in the classroom setting is that when students create multimedia projects, they tend to do this in a group environment. By working in a group, the students would have to learn to work cooperatively and collaboratively, using their group skills and a variety of activities to accomplish the project’s overall objectives.

**TRADITIONAL AND MULTIMEDIA LEARNING THE DIFFERENCE**

*Chart 2 - TRADITIONAL METHOD – A ONE WAY FLOW*

*Chart 3 - MULTIMEDIA LEARNING – AN INTERACTIVE LEARNING PROCESS*
# Various Multimedia Tools

<table>
<thead>
<tr>
<th>Tools</th>
<th>METHODS</th>
<th>EXAMPLES</th>
<th>METAPHORS</th>
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<tbody>
<tr>
<td>Mspowerpoint, Astound Graphics and Flash</td>
<td>Easy to prepare and it can be prepared with many of the popular</td>
<td><img src="image1" alt="" /></td>
<td>SLIDE BASED</td>
</tr>
<tr>
<td>Slide Show Software</td>
<td>multimedia elements like graphs, sound and video.</td>
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<tr>
<td>Macromedia, Flash Authorware, BPP I Learn</td>
<td>Presentation is created using icons to represent different media</td>
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(B)OTHER INNOVATIVE TOOLS SUGGESTED

The researchers suggest some of the methods can very well be applied by the modern teachers. As the researchers feel that basically the core objective of teaching should never be deviated by the use of an innovative method. The following methods which are suggested are an extension to the traditional methods of teaching.

(1) MIND MAP

Mind maps were developed in the late 60s by Tony Buzan as a way of helping students make notes that used only key words and images, but mind map can be used by teachers to explain concepts in an innovative way. They are much quicker to make and much easier to remember and review because of their visual quality. The non-linear nature of mind maps makes it easy to link and cross-reference different elements of the map.

Mind Maps are also very quick to review, as it is easy to refresh information in your mind just by glancing once. Mind Maps can also be effective mnemonics and remembering their shape and structure can provide the cues necessary to remember the information within it. They engage much more of the brain in the process of assimilating and connecting facts than conventional notes.

The key notion behind mind mapping is that we learn and remember more effectively by using the full range of visual and sensory tools at our disposal. Pictures, music, color, even touch and smell play a part in our learning armory will help to recollect information for long time. The key is to build up mind maps that make the most of these things building on our own creativity, thinking and cross linking between ideas that exist in our own minds.

As the recent research point that any particular information explained with the help of graph charts make a high impact in the minds of the people and keeping this as the core aspect the teachers may try to picturize the concepts and show the same to the students.
This would bring very high impact on the minds of the students about a concept

✓ Creates clear understanding
✓ PowerPoint can be used widely.
✓ Innovative thinking improves

(2) TEACHING WITH SENSE OF HUMOUR – “HUMOUR AN EFFECTIVE MEDIUM OF TEACHING”

Everyone loves a teacher with an infectious sense of humor. Looking at the lighter side of life not only fosters cordial relations between professors and students, but also provides welcome relief while trying to follow a difficult lecture on a complicated subject. When there is a willingness to change, there is hope for progress in any field. Teaching is a challenge. Learning is a challenge. Combining both effectively is a challenge. Being humorous is a challenge. However, laughing is easy. We are convinced both by experience and research that using humour in teaching is a very effective tool for both the teacher and student.
Humor strengthens the relationship between student and teacher, reduces stress, makes a course more interesting and if relevant to the subject, may even enhance recall of the material. Humor has the ability to relax people, reduce tension, and thereby create an atmosphere conducive for learning and communication. Numerous studies in the field of advertising have noted that humor is the most effective tool for enhancing recall of advertisements.

It is easy to create a humor in the classroom by reading books of jokes and to listen to professional comics. The students should be encouraged to take notes, especially to learn about the professionals’ use of such techniques as exaggeration, pauses, and timing. Observe reality and exaggerate it - much humor lies in observations about real life and truthful situations. In conclusion, humor not only plays an important role in the healing process but is also very important in education.

(3) Z TO A APPROACH

This approach attempts to explain the application part of a particular concept first. The teacher should explain the application of a particular concept first and explain the effects of such applications. For example in management subject - motivation is explained in a manner that the organization get extensive benefits out of using some techniques like promotions and awards. So here the use of promotion is explained first and later students would get interest in knowing what are promotions and awards. The teacher starts explaining what is promotion and explains what motivation theory in management is. Another example we can try is that in accounting the Income statement and Balance Sheet can be explained first and later drawing their attention to double entry system of book keeping.

Strengths

- Makes a particular concept clear
- Students develop interest to know exactly the concept.
- Creates long lasting memory/correlation of a concept.
Weaknesses

- Take quite long time for a teacher to introduce a concept
- Initial difficulty in understanding a particular concept will be encountered.

Chart 5 - LEANING TOWER OF PISA EXPERIMENT – EXAMPLE TO Z – A APPROACH

Source: vision learning

Z – A approach is explained in the following two charts. In the first chart a man drops cannonball and lead weight from the top of the building. Hypothesis for this experiment is both the object will fall at the same rate.

In the second chart the cannon ball and lead weight have reached the ground.
Our experiment proves the experimental hypothesis correct, two different-sized objects fall at the same rate. This is because the rate of acceleration of an object in a field of force (gravity) is independent of the object's mass (if we ignore wind resistance).

Source: vision learning

**Concept Simulation** - reenacts Galileo's experiment of two different objects falling at the same rate.

The above chart explains the application of that Gallileo's theorem. Here the teacher explains how two objects reach the ground if they are put from a particular distance from ground level. Traditional way of teaching method will be explaining the theorem first and followed by its application. But this Z-A approach goes opposite in a manner that the proof or application is explained first and later the theory. Then it is explained that this the concept developed by Galileo. The above example of tower depicts a (possibly mythical) experiment in which Galileo dropped two objects from the leaning tower of pisa to demonstrate their comparable rate of descent.
(4) MNEMONICS WORDS – WORDS – WORDS APPROACH

Here the teacher is not supposed to talk on a particular concept for a quite long time. But to make it clear to the students he can just go on saying mnemonics or its associated meaning in words. Here he goes on saying only words instead of sentence, and once they come to a basic understanding of the meaning of a particular concept then the teacher will explain in sentences. For example in teaching language courses this technique can be used as an effective medium by the teacher to develop word power.

✓ Dictionary must be used widely
✓ Word power increases
✓ Teacher also gets to know many words pertaining to a particular concept.

(5) ROLE PLAYING AND SCENARIO ANALYSIS BASED TEACHING

Role playing and scenario analysis is mostly used in organizations that try to analyze a problem pertaining to the organization, and this is also used in management institutions. But the similar kind of practice can be tried in other specialization too like science and engineering. Science and engineering courses have practical but in support of those practical if students are given a scenario and other options to solve a particular issue, then the students are exposed to decision making in a given environment.

For example, in teaching accounting the role of accountant can be explained by role playing technique. Invoice and bills can be given to students and asked them to assume the role of accountant. Here the real entries pertaining to transactions are made by the student and this is more practical approach to teaching where theory is supplemented by proper practical knowledge. Similar kind of technique can be applied in management, engineering and science courses.
VI. CONCLUSION

Across the world, information technology is dramatically altering the way students, faculty and staff learn and work. Internet-ready phones, handheld computers, digital cameras, and MP3 players are revolutionizing the college life. As the demand for technology continues to rise, colleges and universities are moving all sorts of student services, from laundry monitoring to snack delivery online. At Columbia University, a real-time Web-based service called Laundry View lets students log on to a Web-based system to see which washing machines are free before they head to the laundry room. They can monitor their wash and can even program the service to e-mail them when their load is done.

Technology is also changing the classroom experience. The classrooms at New York University’s Leonard N Stern School of Business feature all sorts of conveniences for students and teachers. For instance, the room is wired with cameras for photographing whiteboards, so students can receive the images as digital files. In addition, tablet PCs, compact computers that allow you to write notes directly onto the screen with a special pen, replace the archaic projector. With the tablet technology allow professors to make notes on charts and spreadsheets and send them directly to their students’ PCs and he will get a feed back from each student.

From the above, we can make out that the Information and communication technology has made many innovations in the field of teaching and also made a drastic change from the old paradigm of teaching and learning. In the new paradigm of learning, the role of student is more important than teachers. The concepts of paperless and penless classroom are emerging as an alternative to the old teaching learning method. Nowadays there is democratization of knowledge an the role of the teacher is changing to that of facilitator. We need to have interactive teaching and this changing role of education is inevitable with the introduction of multimedia technology and the spawning of a technologically-savvy generation of youths.
The analysis reveals some of the suggestions that the teaching community can practice in the classrooms. Ultimately the teaching people are satisfied when he could reach the students community with his ideas and views. So, teaching depends upon successful mode of communication and Innovation though we mean the changes that we propose to be included in our medium of communication or even inclusion of some other elements in communicating information.

The researchers recommend that the teaching would be highly effective if the teacher start to use the recent multimedia technologies like usage of computers extensively or some modifications in the conventional mode of teaching. The use of computers may be very well practiced in the environment where the use of such technology is highly possible, but there must be some sort of innovation which can also be practiced in an environment where such use of technology is on its way to growth. In those environments use of humor, role playing, words –words approach, Z-A approach are the ideas that can very well be practiced.

The researchers believe that the core objective of teaching is passing on the information or knowledge to the minds of the students. Any method using computers or modifying the existing conventional chalk-talk method are innovative if they ultimately serve the attainment of core objective of teaching.

VII. Research limitations

As the weaknesses that are explained in this research work are purely the views and perceptions of the researchers and which could not be generalized. Even the modifications suggested might suffer from other limitations. The researchers try to suggest some useful modifications which could be tried by teachers as innovative to get maximum results.
REFERENCES

- BPP (2000), Success in your Research and Analysis Project.
- CFA Level 2 Book Edition 2000
12.1 Introduction

Unit 12 deals with methodology and materials of participatory training. Adult educators know very well that there is no one method and material for making adult learning sessions successful and effective. Your understanding of various methods and materials for using in different contexts of adult learning lead you to a more varied and interesting way of holding the attention of adult learners. In the last analysis the exercise of planning for your own self-development appears to be a key for your success as the more you have a feeling of self-confidence and clarity of your professional goals the better is going to be your success in making adult learning processes more effective.
12.2 What and How of Training Methodology and Materials

To answer the ‘what’ question, you may say that training methods and materials are the techniques and resources the adult educator uses to implement the workshop and transfer new knowledge, skills, and attitudes to participants.

Many at time it is useful to differentiate between the methods, tools/aids and techniques in order to use them effectively. See Box 12.1 for differences between methods, aids, equipments and techniques.

<table>
<thead>
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<th>Box 12.1 Difference between Methods, Aids, Equipments and Techniques</th>
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<tr>
<td><strong>Methods</strong></td>
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<td><strong>Tools/Aids</strong></td>
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<td><strong>Equipments</strong></td>
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<td><strong>Techniques</strong></td>
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In order to answer the ‘how’ question, you can point out that active learning workshops use a variety of training methods in order to engage participants in the learning process.

When choosing teaching methods for a particular session, you may consider the following questions:

- Is the method suitable for the objectives?
- Does the method require more background knowledge or skills than the participants possess?
- How much time does it take to prepare and then to use it in the learning session?
- Is that sort of time available with the adult educator and adult learners?
- How much space does the learning session take?
- Is that kind of space available at the venue of learning sessions?
- Is the method appropriate for the size of the learning group?
- What kind of teaching materials does it require?
- Are those materials available?
- Does the method require special skills to use?
- Does the adult educator possess these skills?

12.2.1 Knowledge-based Learning Sessions

The broad factor guiding the selection of methods is the focus of learning. If the focus of learning is increasing knowledge then the methods used may be lectures, field visits, demonstrations, self-study etc.

Adult educators need to keep in mind that they need to talk about only those
facts which the participants need to know. It is important to get the participants’ attention before explaining why they need to know the topic. Tell a story that shows why it is important.

Give a summary. Explain the main themes you are going to cover.

Present the facts and information. Use handouts to reinforce the talk. Participants learn more by listening and actively participating than by taking detailed written notes. Ask participants to tell stories about how the facts will be used. Among the materials to be used, whenever possible, use audio-visual aids such as

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<th>Chalk board</th>
<th>Photographs</th>
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<tr>
<td>Flip chart</td>
<td>Overheads</td>
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<td>Models</td>
<td>Slides</td>
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<td>Posters</td>
<td>Video</td>
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Plan an exercise for participants to practice the knowledge they learned. See Box 12.2 for examples of exercises for talking about knowledge-based lessons.

**Box 12.2 Examples of Exercises for Knowledge-based Lessons**

- If the lesson includes anatomy, put a chart on the wall and ask individual learners to explain the name and function of relevant body parts.
- Ask participants to pull the name of an organ from a bag, place it correctly on the chart and describe its function.
- Ask participants how they will use this knowledge to improve their work performance.
- Ask individual or small groups of students what would you do if...-or- How would you...?
- Then have them present their conclusions to the rest of the participants.
- Ask participants to share myths about the facts, which you talked about, and then explain why the myths are not true.

**12.2.2 Skills-based Learning Sessions**

If the focus of learning is to increase skills, the methods used are more of practice sessions, demonstrations, apprenticeship and learning by doing. See Box 12.3 for examples of the kind of activities such sessions can include.

**Box 12.3 Examples of Activities during Skills-based Learning Sessions**

- Name the skill. Ask if participants have for it any other name(s) in local language(s).
- Tell why it is important. Ask if participants have in mind other reasons for its importance.
- Explain when to use it. Ask participants if they use the skill in any other context.
- Describe the steps involved in performing the skill. Ask the participants if they include some other steps in performing the skill.
- Demonstrate the skill. Ask the participants to demonstrate the skill as understood by them.
- The demonstration must use effective methods, which are applicable to the work environments of the participants. Ask the participants if there are other effective methods to master the skill.
MANDAKINI PANT

- Use only equipment, which is available to participants in the field. Ask participants to name equipments available locally for mastering the skill.
- All participants must be able to see what you are doing. It is possible that one of the participants may be able to or may want to demonstrate the various parts of the skill. Invite such participants to demonstrate all or some operations.
- Explain what you are doing (a written handout with pictures will help reinforce the explanation). Ask participants to draw pictures of what the skill is supposed to involve.
- Arrange practice sessions.
- Come to the most important part of conducting skills-based learning sessions and take time to practice. Make all participants to practice the skill.
- Each participant must receive feedback from you as well as from fellow learners.

12.2.3 Awareness Generating Sessions

If the focus of learning is to generate awareness then the methods used would be role-plays, small group discussion, case studies, simulation, learning games, structured exercises etc. One’s own experiences, both past and present and others’ experiences form an important source of learning. Hence the experiential learning methods provide an opportunity for learners to experience, share reactions and observations, reflect upon implications and consequences, discuss patterns and dynamics, develop practical and conceptual understanding and apply it to the real life situations.

Besides the focus of learning, there are some other important considerations for selecting methods, such as who are the learners, what are their backgrounds? Are the knowledge and experience base of learners being used? Which methods are helpful in building an environment conducive to learning at a particular point of time? How can individual and collective learning be ensured etc? Other factors that play an important role are time, space, competence of facilitators, group size, etc.

Activity 12.1

Consider the kind of learning sessions you have held at your adult learning setup. Are there any kinds other than mentioned above? Write a short note of 300 words on the kinds of method you have used for various types of learning sessions during your career as adult educator.

12.3 Participatory Training Methods

Participatory training has several methods which are in vogue in adult learning. We will discuss the following more popular methods in this section.

a) Lecture
b) Case Study
c) Role Play
d) Simulation
e) Instruments
f) Learning Games

a) Lecture

The lecture method is an effective way to introduce new information or concepts to a group of learners. The learners always appreciate a concise, stimulating and well-delivered lecture.
The lecture method is primarily used to build upon the learners’ existing base of knowledge. The lecture must always be suited to the learners’ level. Asking some relevant and elective questions can help elicit information about this. Thereafter, the adult educator will have to make constant efforts to situate the new information in the context of the training by continuously providing examples and illustrations to relate it to the learners’ context.

Lectures are useful for conveying new information and concepts to the learners and for providing context so that learners can relate what has been learnt to a conceptual framework. Lectures are also good for stimulating and motivating learners for further enquiry and for presenting a specialized body of external information.

To lecture effectively, the lecturer needs to prepare for the lecture, become very familiar with the subject matter, identify and prepare supporting aids to illustrate the points. One needs to provide examples to link the subject matter to the lives of the learners and ask questions to check whether the learners are following. A good lecture provokes the learners to ask questions and note key points. It is advisable that the lecturer maintains eye contact with the learners to assess whether they are following or not, whether they are interested or bored. The seating arrangement has to be such that all can see the aids equally well and hear the lecture and maintain time stipulations. It is important to be aware of one’s own body movements and facial expressions and speak clearly, loudly and use simple language. See Box 12.4 for advantages and disadvantages of lecture method.

### Box 12.4 Advantages and Disadvantages of Lecture Method

**Advantages**
- Allows the presentation of facts, information and concepts in a relatively short span of time.
- Makes possible interaction of learners with multiple resource persons with different points of view.
- Is possible to use for illiterate learners.
- A diverse range of supportive materials can be used to support the content areas e.g. slides, charts, posters, etc.
- A large number of learners can be accommodated at one time.

**Disadvantages**
- The world view of the speaker dominates the knowledge.
- It does not promote interaction in most cases.
- The input may be too abstract if not related to real life situations.
- The pace of learning is determined by the lecturer.

### b) Case Study

In the case study method, the group gets an opportunity to look at others’ experiences in the form of a case. The learners reflect upon and analyze these experiences to derive new ideas. The learner’s own experiences, values, feelings form the basis for analysis of others’ experiences. The adult educator may present case studies in written or verbal forms or even through the
medium of films or songs, depending upon the background and experiential level of learners.

In order to use the case study method, the adult educator may present the case study to the group. One way of presenting the case study is to divide the group into smaller groups and give each group the task (question) to reflect and discuss. Then each group’s views may be presented and consolidated in a collective session.

Among the reasons for using the case study method you may point out that the case study method helps to convey complex theoretical concepts in a simple way. It makes the group to reflect on its own situation in the context of others’ experiences and gives a chance to discuss complex situations. This exercise sharpens learners’ analytical and diagnostic skills and exposes them to situations they might not ordinarily experience in their own lives. It exposes learners to similar experiences elsewhere to enable them feel a sense of solidarity and validation. In addition, it helps in creating new knowledge through collective reflection, analysis and synthesis. See Box 12.5 for advantages and disadvantages of case study method.

### Box 12.5 Advantages and Disadvantages of Case Study Method

**Advantages**
- Simple
- Can be used with illiterates and relatively unsophisticated people.
- Can be used for cognitive learning too.
- Low cost, culturally appropriate.

**Disadvantages**
- May be difficult to find an appropriate case study.
- The case study may be too general to focus on a specific issue.
- Case studies written by some one else contain the writers perceptions, feelings and ideologies which may lead to distortion of the objective reality.
- Hypothetical or prepared case studies may be too idealistic.

**c) Role Play**

One of the most common training methods is the role-play. Role-play is useful where learners share a somewhat similar experience, which is difficult to recall because of its emotional nature. You can also use it where the uniform possibility of recall is less likely among the learners. Role-plays a structured experience; it means that learning takes place from re-enactment of past experiences. It is a powerful training method if the focus of learning is to generate awareness.

The method of role-play is useful as it helps learners utilize their experiences of real life situations. The enactment is helpful in developing awareness at individual and group levels. Through role play it becomes easier to discuss complex social issues in a non threatening environment.

In order to use role-play effectively, you need to select a suitable role play depending on the purpose of learning and identify role enactors/performers. Next, you need to prepare briefs and explain the situation to the learners and tell the audience all the points to be noted. Now is the time to set the stage and start...
Role-play is used in a variety of ways. A small group enacts role-play about a situation while other learners watch the role-play. A discussion follows that enactment. In this case, the role-play is similar to a demonstration where learning occurs through observation. The adult educators themselves, or a few outsiders or a handful of learners, with or without adult educators, can enact such a role-play.

You can also use role-play to stimulate discussion on complex issues. A brief enactment by adult educators or learners or both, can be used to stimulate further group discussion on similar issues and experiences that learners share. This method of learning is essentially group discussion where role-play merely acts as a stimulant or catalyst for the discussion that follows. Its use in this case is similar to an aid e.g. charts, video clipping, etc.

In certain situations, a role-play is also used to practice skills. For example, you can practice how to motivate adult learners by enacting different roles. The prime method of learning here is practicing and receiving feedback from learners and adult educators after that practice. You can also use a role-play as a re-enactment of past experiences. Learners may enact a past situation with which they are familiar.

d) Simulation

Simulation is a method based on ‘here and now’ experience shared by all learners. It involves assigning definite roles to each participant and having them act out a situation according to the given roles. It is carried on long enough to generate responses and reactions based on real feelings as participants need to genuinely ‘get into their role’. However, learning takes place without any serious risk because the situation is after all ‘make-believe’.

The original meaning of the method is derived from the situation used to train aircraft pilots. Since real life training is too risky, any error during learning would prove fatal, realistic conditions of air and pressure are created inside a ‘simulator’ cockpit, and the pilot learns how to fly.
You may use simulation to understand complex societal issues and to learn in a situation which is very similar to real life. Here learning takes place at different levels. Simulation involves “pre-simulation” phase in which you need to select a simulation according to the purpose of learning and develop a conceptual framework. Then you prepare a list of rules/ instructions and briefs for all roles and assign roles to different learners. Try to include all learners, as simulations does not require audience and define the situations and events in which the characters will interact. There may be more than one situation/ event.

Decide the location for simulation. The site/s chosen need to be as close as possible to real life sites of the chosen situations. You need to keep necessary props ready at hand, to be used for different roles.

For conducting a simulation, you need to assign roles, give each person the appropriate role brief. Ask the participants to study their roles and try to ‘become’ the role. It is not a good idea to let different roles study each other’s briefs. Yes, you need to prepare name tags or some other appropriate means of identifying the different roles. Then brief the participants about the situation and let them start acting according to their interpretation of the role. Stop the simulation when appropriate, or when the essential part is over, or if it is getting out of hand.

In post-simulation phase, it is better to give the participants time to get out of their roles. Then ask the participants to share their feelings by posing direct questions, for instance, what happened to you during the simulation, how you felt etc. You may try to draw parallels with real life while analyzing the patterns in the data and collate the participants’ feelings. Finally collect necessary inputs and summarize the entire proceedings. See Box 12.7 for advantages and disadvantages of simulation method.

### Box 12.7 Advantages and Disadvantages of Simulation Method

**Advantages**
- Allows an exploration of real life situations, social processes and behaviors in a relatively non threatening manner/ situation.
- It allows for the study of very complex social processes.
- It is entirely controlled by the learners’ pace.
- It involves activity and universal participation.
- Learning takes place at the awareness level

**Disadvantages**
- It requires that participants cooperate and internalize the roles.
- It is a difficult method and requires an experienced and skilled adult educator to conduct it.
- Mismatch of roles may lead to poor performances by the learners.
- Critical skills are needed to handle feelings generated in the process.

**e) Instruments**

‘Instruments’ are usually in the printed format containing clear instructions and a series of questions, either with multiple choices, or requiring brief replies. Participants fill in the questionnaire individually or in twos/threes for each other. There are instructions at the end of the instruments explaining how to examine answers, assign scores and tally them. The connotations of different scores are also clarified.
The purpose is to generate data about each learner. However, it is left to the learners to decide how to use this information. Some examples of instruments are the personality trait inventory, interpersonal perception form, T-P questionnaire for Leadership, FIRO-B, etc. See Box 12.8 for advantages and disadvantages of instruments method.

Box 12.8 Advantages and Disadvantages of Instruments Method

**Advantages**
- Can be a very effective method for learning more about one’s own self through systematic self-examination, reflection, and in cases, feedback.
- The learner does not feel external pressure or compulsion.
- Learning takes place at the individual’s own pace according to his/her interest and inclination.

**Disadvantages**
- Can only be used with a group which is highly literate
- Needs a certain amount of honesty and genuine interest of the learner to generate meaningful data
- Works better with people who can learn intellectually at the level of abstractions
- Very difficult to design instruments.

**f) Learning Games**

Learning games are seemingly fun activities involving all participants. There are rules and regulations and the games may or may not include a competitive element. You may use games to convey feelings and processes which are implied within the game being played, e.g. trust games, leadership games and so on. After the game is over, it is essential that the feelings of the participants are debriefed and consolidated; otherwise it will remain either an icebreaker or an energizer.

The reason for playing learning games is to explain group processes involving issues of trust, social relationships and so on. You can play the learning games by explaining the game and involving the learners in the game. After the game, you need to consolidate, debrief and derive learning. See Box 12.9 for advantages and disadvantages of learning games method.

Box 12.9 Advantages and Disadvantages of Learning Games Method

**Advantages**
- It is lively, fun and involves everyone’s participation.
- Complex issues can be explained in a simple manner.
- It allows the participants to experience the matter under consideration within the course of the training itself, (also called here-and-now experience).

**Disadvantages**
- Finding or designing appropriate games is not very easy.
- The focus of the game must be clear to the adult educator otherwise debriefing will be confused.
- May generate lot of feelings obstructing learning.
- Entertaining without learning is not the objective.
Other Methods

Besides the methods discussed above, you may also look at the following other methods which are useful in some cases.

i. Demonstrations

ii. Field visits

iii. Apprenticeship Practice

i) Demonstrations

Demonstrations refer to methods in which the learners are provided with an opportunity to observe for themselves the object or processes that they wish to learn. It can be real-life or make believe situations or models. This method is useful in conveying complex information simply, as seeing and understanding is considerably easier than hearing and understanding. Examples include - demonstrating what a biogas plant or a sanitary latrine is through a model, demonstration by the adult educator on how to conduct an interview demonstrating how to conduct safe deliveries to dais (TBA) - through models, etc.

ii) Field Visits

Field visits refer to demonstrations in practical situations i.e. where the subject matter actually occurs or happens in real life. Some examples of field visits are as follows - taking the learners to a hospital in the course of health training, or taking learners to villages in the course of a Participatory Rural Appraisal (PRA) training, or taking community level workers to the block office for training on local government etc. The emphasis again is on observing, asking questions and understanding.

iii) Apprenticeship Practice

Apprenticeship and practice are methods of paramount importance for skill training. The difference between the two lies in that practice is done in controlled situations while apprenticeship is done in real life situations and is usually of longer duration. It is essential in both methods that the learner be supervised by the adult educator and given feedback. These two methods can be used for any skill. In the course of training, it is easier to incorporate practice, while apprenticeship can be an entire training in itself.

Activity 12.2

You may have used all or some of the methods described above. Which of the methods have you found most useful? Give reasons to justify their frequent use by you.

12.4 Training Materials and Resources

When planning which training materials to use, the adult educator may consider the following questions.

- What materials are available?
- Will the material facilitate active learning?
- What can the training facility accommodate?
- Does the adult educator know how to use the material?

- Can the participants learn how to use the material?

Types of training materials include written materials which are useful when teaching knowledge. If they are not available at the appropriate learning level, the adult educator may have to develop new materials. Examples of written materials are equipment instructions, lists for
decision-making skills, and blank charts for record-keeping. While developing and using written materials, make sure that they contain only the information that participants need to know and they are clear. Here, as layout is very important, you need to keep pages looking ‘clean’ and uncluttered and use language and diagrams appropriate to participants’ level of knowledge. For example, use graphs if participants can read a graph.

Audio-visual materials are useful for teaching knowledge and skills. Examples of audio-visual materials are:

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<tr>
<th>Chalk board</th>
<th>Photographs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flip chart</td>
<td>Overheads</td>
</tr>
<tr>
<td>Chart and Diagrams</td>
<td>Slides</td>
</tr>
<tr>
<td>Models</td>
<td>Video</td>
</tr>
</tbody>
</table>

While choosing audio-visual materials, you need to consider how the material would enhance active learning and if the material is appropriate to the knowledge level of the participants. Also consider how you will use the material and if it is available for the training. You need to ensure that all the participants are able to see and hear the material.

In case the method requires any supplemental materials, ensure their availability. To show a film you need a screen or blank white wall. To use a flip chart you may want to use different color markers. Make sure that the facilities are appropriate for use of the material.

**Activity 12.3**

Considering the popularity of information and communication technologies in almost all walks of life, identify at least five new materials that would help you in your profession.

## 12.5 Roles of Adult Educators

Given the learning agenda, an adult educator has to play several critical important roles to ensure that the learners and learning process are at the centre of all training. The educator needs to ensure that there is adequate stimulation to critical analytical faculties of learners and there are occasions to value, analyze, share and reflect upon the experiences of learners. In the process learners feel empowered and there is enhancement of their self-image. Try and create and nurture conditions of learning.

The adult educator also needs to keep in mind that these multiple roles are played not only during the training, but also prior to the training and after the training as well. Each of the roles during training and after the training requires a particular set of critical competencies, comprising three components, namely, knowledge, awareness and skills. An effective performance of any role involves the use of multiple competencies.
### Table 12.1 Roles of Adult Educator

<table>
<thead>
<tr>
<th>Training designer and planner</th>
<th>Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessing learning needs and evolving learning objectives</td>
<td>Mobilizing financial resources Planning dates/venue Scheduling logistics and required Administrative support Ensuring communication with learners, resource persons regarding the venue, travel details etc. Planning and co-coordinating arrangements for field trips, etc. Arranging for needed support systems at the venue (separate formations for men and women; arrangements for children accompanying mothers)</td>
</tr>
<tr>
<td>Planning strategy of training Working out the detailed contents, sequencing them and choosing appropriate methods Involving learners in the designing phase by identifying and preparing resource persons Preparing and selecting learning materials and aids Preparing self and the adult educator-team delegating responsibilities for training</td>
<td></td>
</tr>
</tbody>
</table>

### Facilitator

Facilitating group processes, to keep the group together and let it grow (participation, communication, decision-making, leadership, conflict resolution, etc.)

- Summarizing, synthesizing information
- Appreciating and encouraging individuals and the group as whole.
- Initiating discussions, articulating unsolved group issues. Creating a learning environment Pursuing, nudging, pushing, cajoling, building their confidence so that participants can perform beyond their existing potential Managing the heterogeneity within the group

### Friend, philosopher, counselor and guide

Being accessible to learners, listening to them, their anxieties, thoughts, problems, joys, by being a sounding board Sharing one’s own life experiences with the learners Providing a sense of direction, by giving feedback Developing a close rapport with learners and building their trust and confidence Being a sounding-board when required responding positively and understanding

### Learner

Paying attention to what others are sharing being open to and accepting differing frameworks of analysis and perspectives Seeking additional information, clarifications, asking questions Acknowledging others’ abilities and appreciating them Accepting “learning structures” set up by others during the training and supporting each learner

### Educator

Providing new information and concepts Eliciting learners’ experiences and analysis by setting up structures, asking questions, etc., Synthesizing, consolidating and conceptualizing the new information and analysis Directing, managing structured learning experiences -role-plays, simulations, discussions, etc. Using learning aids effectively video-camera, tapes, flash cards, audio-visual aids, etc.
the origins of the anxieties or problems of the learner Setting up sessions to enhance the self-confidence and self-esteem of the concerned individuals. in an informal manner Showing solidarity, holding hands, offering a shoulder to cry on, being sensitive to and responding to a crisis if any

<table>
<thead>
<tr>
<th>Recorder and documenter</th>
<th>Evaluator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observing keenly the flow of content and processes taking place Maintaining detailed roles on a regular basis Involving learners in the recording/documenting efforts Exchanging roles with co-adult educators and incorporating it into further planning of sessions Learning more in depth about individuals, group, learning process, etc. Using data for monitoring, evaluation purposes, Addressing additional issues of individuals and groups that may arise in the process.</td>
<td>Planning evaluation/monitoring mechanisms Involving learners in the evaluation process Soliciting formal and informal reviews to assess every event and ongoing process Matching feedback with objectives of the session and assessing if learners are learning Sharing reflections/analysis with co-adult educators and feeding it into further planning Providing relevant feedback to the adult educator team and learners to facilitate the learning process.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Follow-up co-coordinator</th>
<th>Report writer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating at regular intervals Disseminating feedback from individuals and organizations to feed into the next training Assessing future learning needs and planning additional events for the same Providing support through participation, involvement in designing, preparing strategy and materials, etc. Reflecting and evaluating the training outcome with co-adult educators</td>
<td>Planning a reporting format (from learners’ needs expressed by learners) Organizing all the needed information, notes, and flip charts for report-writing Preparing separate reports for different constituencies, if need be (i.e. fund providers, learners, etc.) Disseminating it to both learners and wider audiences.</td>
</tr>
</tbody>
</table>

As is evident in Table 12.1, the adult educator has to play multiple roles. This requires a very systematic deliberate and planned process of training adult educators in the context of participatory training.

**12.5.1 Adult Educators’ Training**

The role of adult educator in participatory training is much more radical and critical than the role of adult educator in traditional training. Participatory adult educator has to be much more resourceful, competent and creative to fulfill his/her task as facilitator-manager of the training processes. The adult educators need to systematically prepare to effectively play the multiple roles, fulfill the engrossing functions and shoulder the demanding responsibilities incumbent on them. Three key aspects of adult educator’s
training include i) learning the theory of adult learning, ii) developing skills as a facilitator and iii) self-development of the adult educator. In fact the third is the most important, since the other two are of no use in the absence of the third one. Let us talk a little more about this aspect in the next sub-section.

12.5.2 Understanding Self

It is important to understand the self in the context of participatory training. It is generally agreed that the self has three broad aspects. These three constantly interact with each other. causing confusion or congruence depending whether they are in harmony.

i) The Cognitive Self: This refers to our mental or intellectual capacities to store and process information, our memory and logical abilities.

ii) The Affective Self: This refers to our emotional side, our capacity to feel and express emotions.

iii) The Behavioral Self: This refers to our behavior aspects, our actions, skills and expressed behavior.

Understanding self is important for developing congruence between cognitive, affective and behavioral aspects of self and for developing sensitivity towards learners and understanding their self development process. It is important for developing faith in others’ capacity to learn, grow and change and for building up the self-esteem of the learners into a realistic and positive self-concept.

It is only when we personally experience the transformation of the self and a sense of personal growth, that we as adult educators in participatory training are convinced that others can also achieve the same.
changing one self. Understanding one self requires collection of information about “one’s own self”, whereas change of behavior requires self-disclosure. As adult educators, we need to develop “openness” in ourselves, and feedback and self-disclosure become essential in this process. Feedback from others and self-disclosure are reciprocal activities crucial for self-development. Let us learn in brief a bit more about feedback and self-disclosure.

Feedback is a verbal or non-verbal communication with a person or group which provides others with information on how their behavior affects you. Feedback is also a reaction by others usually in terms of their feelings and perceptions, about how your behavior is affecting them. Self-disclosure is a process of sharing of “me” with others.

Feedback is information given to a person (or a group or an organization) about how one affects others. It helps one become more aware, both of one’s strengths and weaknesses. It does not tell one what one should do, but it raises questions and helps one to decide whether to change one’s behavior, so that one can be more effective and better able to achieve what one wants. If feedback is given in a positive way it can be helpful. But if it is given ineffectively, it is not only unhelpful, but can also be quite destructive.

12.5.3 Planning for Self-Development
Planning for self-development usually involves identifying areas that require development. One can identify aspects about oneself that one would like to develop; for example, I want to reduce my aggressiveness or I would like to be able to say no without feeling guilty, etc. Prioritize these needs and assess their importance over the next few months. There may be several aspects that one would like to develop. It helps to assess what is more important and needs immediate attention. Choose one priority area to begin with. Identify obstacles in self and in environment. Then you can try and identify the factors that are likely to block the process of self-development. This could involve looking inside one’s behavioral patterns, attitudes, temperaments etc. The environment, other people and situations can sometimes create obstacles in the process of self-development.

The next logical step is to decide how to go about improving an aspect of self. This includes detailed planning of activities to be carried out in order to achieve the goal. A time frame also needs to be developed for this plan. You may seek others’ help. Self-development plans invariably necessitate seeking help from other persons. It is rather impossible to develop oneself in isolation, all by oneself. We need the help of others, our colleagues, family members, etc. to be able to engage in self-improvement activities.

Any change process needs regularly monitoring. In some form or other self-development process also needs close monitoring. You need to evolve a mechanism for such monitoring at the time of planning itself.

Activity 12.4
Do you consider self-development as an important dimension of participatory training? As an adult educator, have you ever contemplated a serious effort to undertake self-development?
12.6 Conclusion

We highlighted key-training methods and materials used in the training process. We discussed the multiple roles of an adult educator. Finally, we explained the need and process of self-development of an adult educator.

12.7 Apply What You Have Learnt

As an adult educator, you may want to receive feedback and may also tell adult learners about its significance in their self-development because you have already learnt that feedback is a way of giving help. It is a corrective mechanism for the person who wants to learn and make sure that there is a good match between his/her behavior and intentions. It is a means of increasing a person’s autonomy and establishing one’s identity—to answer the question “Who am I?” Giving and receiving feedback is an important activity in one’s professional life. As a practical exercise, after completing the study of all the units of Course 1, and after going through the following guidelines for giving feedback in Box 12.10, provide your feedback on the first four units of the course. You may follow the guidelines and prepare your feedback.

Box 12.10 Guidelines for Giving Feedback

- Do be specific. Give examples and data. For example, “When you interrupted me just now I felt annoyed”. The other person is able to make use of such information if s/he chooses to do so.
- Do describe your own feelings and reactions. For example, “I felt hurt.” This is what you actually know.
- Do think of the needs of the other person and of what will be useful to him/her. Feedback should be constructive.
- Do speak only of behavior, which the other person could change, for example, her/his habit of interrupting. This is within her/his control.
- Do choose the right time, climate and company to give feedback. It is most useful! Effective immediately after the event.
- Do give feedback when the other person asks for it. Even better is to ask her/him exactly what s/he wants to know.
- Do encourage her/him to check with anyone else who was present about the accuracy of the feedback. This can be done in a group. Feedback is more effective if it is received from several sources.
- Do ask the receiver if s/he understands what you are saying even though s/he may not accept it.
- Don’t make general statements, such as, “I feel annoyed because you never listen to me.” Unless you can give some specific examples, the receiver may not understand or believe what you are telling her/him.
- Don’t describe the other person’s feelings or motives or intentions. For example, “You wanted to hurt me”. You do not know this: it is only your guess or interpretation. Such feedback will probably be rejected.
- Don’t judge the other person’s actions. For example “You were wrong to shout at me,” Statements like this will only produce a defensive reaction.
- Don’t make general evaluative statements about the other person’s character. For example, “You are dominating and inconsiderate”. The person who is told this will probably react defensively.
Dynamic Goal-Based Role-Play Simulation on the Web: A Case Study
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Dynamic Goal-Based Role-Play Simulation on the Web: A Case Study

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ABSTRACT
This paper outlines and discusses the pedagogical approach, the technical design architecture, and an innovative implementation of a collaborative role-play simulation technology (called the Role-Play Simulation Generator). It also includes summative evaluation data derived from a case study application of this technology. The pedagogical approach of this collaborative learning technology is based on the principles of goal-based learning, and learning by doing in authentic environments where students are allowed the opportunity to acquire the intended learning outcomes by making mistakes in safe environments. The technology used to support this environment is Web-based simulation, which has been custom-designed for generating similar learning environments. This work is the continuing effort of a multidisciplinary team comprising subject matter experts, learning design architects and Web-based tools developers at the University of Melbourne and Digital Learning Systems P/L in Australia. Evaluation data from a case study application of this collaborative learning design has revealed a heightened and a positive disposition among students towards the subject matter content.

Keywords
Goal-based learning, Role-play simulation, Role-play simulation generator, Learning environment, Authentic learning, Learning by doing, Reflection-in-action

Introduction
The work described in this paper has been partly supported by "The Teaching and Learning Multimedia Educational Technologies Committee" at the University of Melbourne. This project is situated in a subject (World Politics in Transition) in the Political Science Department at the University of Melbourne. Prior to 1997 this subject relied on the conventional approach to teaching and learning which comprised lectures, tutorials and individual research carried out by students. Students were assessed on the basis of a 3,000-word essay and a two-hour exam at the end of the subject. The new approach (for those students who chose to select this option), sought to achieve the same learning outcomes with the help of role-play simulations and collaboration, and the communications and researching capabilities of the Internet. This new "goal-based role-play simulation" on the Web provides a virtual space for students to examine the political processes and theories that are introduced in the lectures.

Theoretical Foundations
Our pedagogy is based on the belief that learning is most efficient and effective when it is situated in realistic settings where learners are clear about, not only the reasons for learning but the context or the ecology of their learning environment. This view contrasts with the notion that subject matter can be represented in schemas, stored in memory, and retrieved when needed. Gestalt psychologists, such as Wertheimer, Kohler, and Koffka, argued in favour of the role of insight, perception and reflection in the learning process as opposed to
association based primarily on past experience, such as that proposed by Thorndike, Skinner and Pavlov (Bower & Hilgard, 1981). We wanted to create situations that were not only motivating and challenging, but that necessitated the learning of facts, principles and procedures, as well as the cultivation of insight, perception and reflection. To achieve this outcome, we used and improved upon the simulations first developed in the early 1990s by Vincent and Sheppard (Vincent & Sheppard, 1998). This approach can be also described in Schank's terminology as a Goal-Based Scenarios (Schank, 1997) or more accurately as a Dynamic Goal Based Scenario (Linser & Naidu, 1999). A Goal-Based Scenario (GBS) is essentially a simulation in which learners assume a main role, which has associated with it a mission. Their "goal" is to accomplish this mission or task associated with their role(s) in the scenario. In order to achieve this goal the learner needs to acquire particular skills and knowledge. This is where and when the learning takes place. Goals in this context refer to the successful pursuit of the task at hand. A GBS therefore serves both, to motivate learners and also give them the opportunity to "learn by doing". As long as a goal is of inherent interest to learners, and the skills needed to accomplish those goals are the targeted learning outcomes, we have a match and a workable GBS.

One of the most harmful misconceptions people have about learning is that being able and smart comes from knowing a lot of rules. Behind this notion is the sense that reading a lot of textbooks, articles and resources, and absorbing what these say will lead one to acquire the knowledge and understanding. While it makes sense to say that learning comes from content knowledge, most of that knowledge in practice looks quite a bit different than what you find in textbooks. The architecture of this learning environment follows from the premise that if we are to prepare better students for the challenges of the contemporary workplace, we must shift our focus from a content-centered to a problem-based approach. Problem-based learning is based on the principles of a situated cognitive model of learning (Schank, 1997; Schank and Cleary, 1995). The primary propositions of the situated cognitive model of learning are: a) that understanding is gained through interactions with authentic cases and in situ; and b) cognitive conflict is the stimulus for learning, which also determines the organization and nature of what is learned (Savery & Duffy, 1995).

Brown and Palinscar (1989) assert that change is more likely when individuals are required to explain, elaborate or defend their positions to others as well as to themselves, which gives rise to cognitive conflict in an individual. These authors argue that cognitive conflict arises when the learner is exposed to disagreement between existing knowledge and new anomalous information. Chin and Brewer (1993) examined the role of cognitive conflict in promoting conceptual change, and attribute these changes to the following four cognitive attributes: status of the anomalous data in the perception of the students; characteristics of prior knowledge; learner's perception of the credibility and validity of the new information; and processing strategies. Whether cognitive conflict is experienced by the learner, and if it will result in change is dependent upon those four cognitive aspects ascribed by Chin and Brewer (1993). While the design of role-play simulation does not explicitly solicit cognitive conflict, the interactions among the roles challenges the theoretical basis of various actions that students take in the simulation. When the students are engaged in the role-play, a level of cognitive conflict is evident, for example, in defending a situation or a position in the pursuit of goals as required.

If the skills which we would like students to learn have genuine utility in particular contexts, then one way to approach curriculum is to identify such contexts, and allow students to explore situations which they find most engaging and in which these skills naturally come into play. Dewey’s (1938) observations on the essential role of activity in learning are an early expression of an idea later elaborated with respect to the design of learning environments. Providing a means for a student to directly experience problem solving episodes takes advantage of the way people naturally learn (Schank & Cleary, 1995), and can expose the student to a variety of cases, ie., whatever range of phenomena the environment is capable of recreating. In particular, people learn by experiencing failure (Schank, 1982). This is because, in seeking to explain an anomalous event, mental machinery is set into motion which can dynamically alter memory organization. In other words, people learn from having to explain (Schank, 1986). Since the need to explain arises only when something unexpected happens, a good learning-by-doing environment would put students into situations where they can possibly encounter failure and encounter these failures in a safe and protected environment. The role-play simulation described in this paper offers students exactly that opportunity, that is the benefit of making mistakes without serious consequences. The requirement at the end of the simulation for the preparation of "role summaries" also forces students to engage in explanation and internalization of the learning activities.

The activities in an environment must of course be coordinated with the environment itself, or put another way, the activity should take place within an authentic setting (Brown, Collins & Duguid, 1989). Learning in situated settings provides for richer sources of knowledge than does learning from didactic descriptions. This notion is a familiar one in domains where apprentices acquire their skills from master practitioners, and can be adapted for instruction in cognitive domains (Collins, Brown & Newman, 1989). Anchored Instruction (Bransford,
Dynamic Goal-Based Scenarios

The idea that learning must begin with a goal arises from observations of how people learn naturally. People learn something because it helps them achieve some goal (Schank, 1997). Situated approaches to learning environments (e.g., Anchored Instruction) share a common emphasis on how learning should take place (namely, via the exercise of skills and knowledge within an authentic context). The role of the student in anchored instruction activities, for example, includes observing some events (e.g., watching a video or reading a newspaper report), verifying the accuracy of some information, looking for clues, and applying those clues to solving a problem (CTGV, 1991). The importance of goal pursuit to learning though, suggests that students should be given opportunities to put into practice the skills being taught. This approach has two benefits. First, practice facilitates skill acquisition (Anderson, 1983), second, applying skills toward achieving a specific goal provides a context in which those skills are useful (Bramsford, Sherwood, Hasselbring, Kinzer, & Williams, 1990; Collins, Brown & Newman, 1989). The first steps in constructing a learning episode then, are articulating the target skills, and selecting a goal for the student to pursue which is appropriate to those skills. The learning environment must be able to support the pursuit of such articulated goals and skills in an authentic context.

The learning environment must then be designed to include a meaningful context for pursuing that goal, in which the student’s activities are both engaging and plausible with respect to the goal the student is pursuing. Goal-Based Scenarios (Schank, 1997) provide an explicit account of instructional environments in which the learner is engaged in pursuing a goal, within a simulated environment, in order to master a set of target skills. The student is an active participant in such a scenario, assuming a role in which resources provided by the program are available to help the student progress toward completing the task. The key organizing principle behind a Goal-Based Scenario (GBS) is that the instructional goals are distinct from the task goals (called the mission) which are set within some activity (called the context). One approach has been to provide resources on demand, which requires a sophisticated ontology to classify different cases and resources into a structure so that the software can pick up the appropriate case or resource for presentation at the appropriate time.

The instructional goals of GBS comprise the development of skills as well as knowledge of facts and cases. In order to gain an understanding of processes, relations and theories as well as knowledge of facts and cases a GBS needs to be reconceptualized so that the instructional goals of knowledge and understanding can be included within the activity undertaken by participants. One way is to give the task goals a pedagogical value so that the learning activity itself becomes a reflective process in which reevaluation of action takes place. In such an environment both the scenario and the task goals are neither fixed nor given but are rather altered by the very actions of those engaged in learning. In other words the scenario becomes a "dynamic" scenario and this requires participants to understand both processes and relations as a byproduct of the necessity of evaluating the effectiveness of their own actions.

In Dynamic Goal-Based Scenarios the task goals are not invented for the student. Rather, it is the student who constructs these goals in accordance with the role as well as the strategies by which these goals are to be achieved. They also comprise the attainment of facts, principles and cases, as well as the understanding of the issues and theories which help to explain these cases. As a consequence, the very activity of constructing task goals requires participants to research facts. In pursuing strategies to fulfill these goals they learn to understand the relations and processes that they themselves create. Thus the instructional goals of knowledge and understanding are achieved in the course of the participants’ activity in constructing and pursuing the task goals. This is implemented in the form of formal writings of role profiles at the beginning of the simulation in which the students are asked to articulate the goals of the role/character they were playing. These role profiles were made available to other role players so that a dynamic mechanism could be set into action during the simulation as each role evaluated the stipulated orientation of all the other characters in the simulation to keep on adjusting theirs as the simulation progressed.
Our role play simulation extended the concept of "resource" from pre-packaged multimedia content, which are presented to the learners on-demand, to an integrated communication environment designed to provide the "situatedness" for authentic learning. Communication in this environment is made possible by using the Web. The web enables learning at any place and any time -- a feature particularly appreciated by adult learners whose experiences are explicitly leveraged in the simulation. The simulated world, which provides both the context and the arena in which students interact, resembles the real world in both its political history and the characters (roles) occupying it. An initial scenario developed by the lecturer adds to the scenario a number of fictional events or facts. From that moment on an alternative world (to the one we call the real world) emerges from the responses and activities of the roles - thus new events created by the students provide the context for learning. As new events are created, students are confronted with new problems to evaluate and act upon. Their responses then need re-valuation once they become aware of the effects (both desired and undesired, and intended and unintended), through the actions of others. Mistakes become part of this learning experience. They are not so much to be avoided, as learned from, and the lessons applied to newly emerging situations and contexts.

**Learning Design Architecture**

Following from this then, the four essential ingredients of this learning and teaching architecture are:

- Goal-based learning;
- Role-play simulation;
- Online web-based communication and collaboration; and
- Lectures and tutorials.

First, goal-based learning is acknowledged as a strong motivator of learning. Typically, goal-based learning comprises a scenario or context, which includes a trigger or a precipitating event. This event may be presented as a critical event and usually requires an immediate response from students.

The second critical ingredient of this learning architecture is role-play, both in the sense of playing a role, playing with possibilities and alternative worlds, and playing to "have fun". The strategy of learning through playing is significant, not the least because 'having fun' in the process of learning is an extremely useful motivator. More importantly, it gives students a personal stake in the proceedings. A distinction is drawn, sometimes between a "simulation" and a "game". A game will have a sense of "winning" or "losing". The work described here is a "simulation" in that at the end of the activities, there is no "game to win or lose". Students in this web-based simulation are organized into teams playing particular roles. Students play out their roles within the context of the given crises or situation. In order to play out their roles effectively they need to do research. Data for this research is available via a large number of links on the role-play website but it is also necessary for students to do traditional library research as well as attend lectures and tutorials. The provision of resources by this mechanism serves to simplify the simulation generator software in that no elaborated schema is necessary to classify the resources to provide "resources on-demand".

This simulation is designed to create a safe and authentic environment to situate student learning in the area of political science. It has sufficient richness in it to reflect the complexity and authenticity of the "real world". The "authenticity" in the simulation is necessary in order to ensure that there is a "personal stake" in the decisions taken in the simulation. However, it is particularly important to recognize that some students could suffer intense psychological stress during the simulation exercise because of the roles they play. Students ought to know that they are able to "escape" from this artificial world and return to the "real world". The simulation generator used for this simulation makes this possible. It provides a clear separation of the simulated from the real world. This is considered to be an important contribution of this simulation generator in comparison with the use of generic email or text-based conferencing systems. This escape from, and re-entry into the simulated world is an important element for situating learning by providing distinctly different environments for experiential learning and reflective thinking.

The third critical ingredient of this learning architecture is the Web. The Web houses the virtual space for the role-play, enables communication and collaboration among students, and between the students and the lecturers. The Web also enables access to "just-in-time" resources by making available to students resources (such as up-to-date news from electronic newspapers and web-sites etc.), from all over the world as and when they need them. Without this capability the content of the role-play would be significantly weaker.

The fourth critical ingredient is the traditional face-to-face lectures and tutorials. Many experienced on-line educators (Price, 1998; Hedberg & Harper, 1998; Brown, 1998; Durham, 1998) have emphasized the importance
of including face to face interaction in teaching with the aid of computer mediated communication and online teaching. The importance of incorporation of these techniques into the learning architecture is critical to the presentation of facts, cases and theories. They also provide communicative events that stimulate reflection about actions undertaken and strategies pursued by comparing real world events with the simulated ones.

Technological architecture and modeling of the simulation

A "Role-Play Simulation Generator" generates the role-play described in this paper. The role-play simulation generator (RPSG) provides a structured learning environment to support particular areas of study such as "World Politics in Transition". Indeed, it has applicability in all areas of learning where simulation of roles, problem solving, communication and interaction among participants is involved. The role-play simulation is based on the following foundations of learning (see Figure 1).

1. Scaffolding (tasks that lead the roles to achieve particular outcomes);
2. Resources (information that is subject matter and content specific);
3. Interaction facilities (sim-mail and sim-conferences for communication);
4. Social structure (framework that supports the rules for playing the game).

These four foundations of sound learning define the critical attributes of the RPSG (i.e., the Role-Play Simulation Engine encapsulated in the rectangle in Figure 1), and the design of the Role-Play simulation. They also provide the creator of a simulation a sound pedagogical framework for building a role-play simulation. This comprises defining the learning tasks (scaffolding), identifying the relevant information (resources), defining the sim-conferences (interactions), and specifying the roles of participants and their rights to the conferences (social structure).

The role play simulation generator enables the creator of the simulation to specify the roles which are central to the operation and success of the role-play simulation. The generator also enables the simulation creator to define tasks, create sim-conferences, and assigned rights to participants in these conferences, as well as provide specific information and scaffolds to support the simulation. For example, a simulation creator can send sim-mail at the appropriate time to support a learner, or set tasks to guide the learners towards achieving specific learning goals. This is an example of scaffolding. Interactions between the learners are communicative events.
This simulation is driven by a variety of “tasks”. The composer can set “tasks” for specific roles. These tasks can have time limits. When a role acts on a task, the output of that action may become a task for other roles. These tasks can serve as scaffolding for the students guiding them progressively towards the final overall goal of the learning experience. When necessary, these tasks can also be used for assessment purposes.

Roles and participants

In the Role-Play Simulation Generator, the lecturer who creates the simulation is denoted as "simulation composer" (composer for short), in the simulation. The composer creates World(s) and Role(s). All Worlds of this simulation have the same role-structure. The term "World" refers to the grouping of participants into smaller groups instead of running a simulation with many more roles. The lecturer, acting as composer, sets up a participant list, groups the participants into different Worlds and then assigns the participants different roles. Participants play the simulation via the assigned roles. Freeman and Capper (1999) have argued for the need for anonymity in simulations. Accordingly, the real identity of individual participants in the simulation is not revealed. If there is collaboration outside the simulation (e.g., having more than one participant playing the same role within a World, such as is the case in "World Politics in Transition" simulation described here), the simulation does not distinguish between different participants playing the same role. Private communication between participants playing the same role can take place via the "NotePad".

A "simulation conductor" and a "simulation controller" support the composer in this work (conductor and controller in short, respectively). The simulation controller is a tutor or a lecturer who is able to modify the information presented for the roles, monitor the messages and jump in to support particular roles, if necessary. The simulation conductor, on the other hand, is a hidden role in certain World(s). The conductor can monitor only selected activities in the assigned Worlds. Different roles have different rights in the conferences. The conductor's role, for instance has the ability to read all messages within the World where the conductor lives. However, the conductor does not exist in the message recipient list and is therefore "invisible" to all the other roles. The participation of the conductor in conferences is subjected to rights set by the composer.

Information types

The Role-Play Simulation Generator is based on the abstraction that human interactions are communicative events requiring information exchange. By providing a safe, controlled and authentic simulated communication environment, students can play different roles in a complex social situation. There are four types of information interacting in the simulation:

1. The information provided to each role by the composer. This type of information supports the game scenario in the RPGS. There are four sub-types of this information:
   - Information presented to the students before login. Every user will see this information and hence it can be used as general orientation to the game.
   - General information after login. To reduce the amount of repetitive work by the composer, this is the material presented to all participants. The overall goal of the group may be established at this point.
   - Information for specific Worlds. When required, different Worlds may run slightly different scenarios that are set up using this subtype of information.
   - Information specific to the Role. By creating different information for different roles, there will be a genuine need for the students to communicate in order to achieve a common goal. However, this information type may be used to create individual learning goals for the student. In the current simulation, this type of information was used by the composer to give specific instructions to particular roles in order to steer the direction of the game.

2. Structured and prepared information by roles (in the form of formal writing). Initial role positions can be set up either by the composer or provided by the students through the composition of their "role profiles". This information may be made available to all roles in the same World. The "World Politics in Transition" simulation requires students to provide the role profile as a starting point for the simulation. There is no provision as yet, for sharing role profiles across the Worlds in the current implementation. That the students are asked to write the role profile at the start of the simulation is an important design of this learning environment in line with the Dynamic Goal-Based Scenarios described above. This establishes the need for conducting research, formulating the position of the roles and acting as the "trigger" for the continuous evolution of the goals throughout the simulation.
3. Information entered and/or read by the participants in conferences, and finally,
4. Information exchange between participants via an email-like subsystem of the simulation.

Figure 2 shows the welcome screen of the "World Politics in Transition" simulation. Information provided by the composer is shown in the main frame with all the available conferences on the left-hand frame, and student's tools below the main frame. The copyright notification is at the bottom frame.

Interaction types and rights

Roles in the simulation are played via a messaging system that utilizes e-mail communication between participants, as well as general-purpose messaging to roles within the same World and/or conferences. The general-purpose message is very similar to email. However, since it is not a "real" email system, roles can only communicate with other roles by selecting role names in the recipient list. The real name of individual participants is not recognized by the mailing system, although the conductor can monitor all messages passing through the general-purpose message system. The simulation mail system operates within the context of the role-play simulation. Unlike other generic email-based simulations, the simulator removes the risk of confusing the role with real life, which is an important aspect of this simulation. The anonymity of participants is enforced by the simulation mail system automatically. The conference is implemented to reflect the various kinds of forums found in politics, commercial and other environments.
The conferences in the simulation have a special feature that is not found in most conferencing software, and this incorporates the notion of different document types. For instance, it is possible to set up a particular "News Agency" as a conference in which there are three types of documents: draft, submitted and news. Every role in a World may have "read" rights to the document type labeled as news. In addition, there may be several roles called "Reporter A", "Reporter B" etc. who will have "read", "write" and "create" rights for the document type called draft. Reporters also have the right to convert drafts into submitted form. "Reporters" can work on their drafts, discuss such drafts among the reporters without any other roles looking at the draft. When satisfied and/or agreed upon among the reporters, the draft may be converted to submitted form. The role of "Editor" may have "read" and "write" access (but not "create" rights) to submitted form. Hence, the Editor can only work on the submitted document. The Editor may also have the right to convert the document type submitted to news effectively broadcasting the news to the rest of the World.

We have created many conferences in this simulation including two simulated news services: BBC and CNN (see Figure 3). It shows the two document types within the BBC conference area. To exchange information, the role players used the document type called "Memo". All roles have read rights to the document type called "Article".

![Figure 3. Screen shot displaying the numerous conferences in the simulation](http://polsci.politics.unimelb.edu.au/ps11/step2.asp?SID=7510-sim0010032 - Microsoft Internet Explorer)

**BBC**  
British Broadcasting  
This is the BBC World Service

- **memo**  
  - US Soldier killed by4rynna 10/10/99 12:11 PM  
  - Serb Chemical Warfare Threat 10/10/99 1:05 PM  
  - Serb Chemical Warfare Threat 10/10/99 1:11 PM  
  - Russian appealed at accusations 10/10/99 1:14 PM  
  - FACTS Ladies and gentlemen 10/10/99 2:24 PM  
  - Pressure on NATO - publish? 10/9/99 12:00 PM  
  - unfinished 10/9/99 12:00 PM  

- **Article**  
  - Change to KLA 10/9/99 11:34 AM  
  - Violence in Kosovo 10/9/99 11:22 AM  
  - Confusion rises in Mirosevic's office 10/9/99 11:22 AM  
  - Draskovic claims cover-up, attempts at re 10/9/99 10:26 PM  
  - British leader denies British SAS Involv 10/9/99 10:34 PM  
  - Yeltsin claims health, terrorist actions 10/9/99 10:42 PM  
  - BBC uses video message from head of nat'l army 10/9/99 9:28 PM

**Using RPSG for simulation generation**

The task of setting up Web-based simulations has proven to be beyond the interest and technical ability of many, if not most teaching academics. There are many reasons for this. Some of the reasons for this are lack of
sufficient technical skills, and the time it takes to acquire the necessary skills. The Role-Play Simulation Generator enables educators to design and implement a web-based simulation as easily as navigating through a Website. Figure 4 is a screen shot of the simulation generator showing how to set up the welcome screen's graphical information, and general setup and copyright message in the simulation generator.

The Role-Play Simulation Generator is built on a sound pedagogical foundation. It enables the simulation generator to design learning tasks that are in line with their intended learning goals. The use of the Simulation Generator empowers innovative teachers to experiment with creating meaningful role-play simulations and getting their students to interact, collaborate, discuss, lobby and practice the skills and theories demanded by their field of study. It empowers educators by reducing their dependence on the technical elements of employing Web-based role-play simulations.

Evaluation

In the following section of this paper, summative evaluation data is presented from a case study application of this role-play simulation. An end-of-term questionnaire was administered to the students in the World Politics in Transition Simulation to seek feedback on their learning experience from using this role-play simulation. The students in this subject participated in this simulation in lieu of a formal examination. The assessment weighting
for work on the simulation comprised: 25% on the writing of the role profile, 25% on the degree of participation, 25% on the quality of participation, and 25% on the final role summary. A selection of the questions asked about their experience, and their responses to these questions are presented in the following.

The perceived effectiveness of the simulation in enabling students to achieve the specified learning outcomes was found to be generally high by the students. Table 1 shows the questions asked, and the average of the responses on a scale of 1 to 5 where 1 is "very useful" and 5 is "useless".

Table 1. Student responses towards the achievement of learning outcomes

<table>
<thead>
<tr>
<th>Question</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding the limitations under which States and International Organizations like the UN and NATO operate.</td>
<td>1.55</td>
</tr>
<tr>
<td>Understanding the role played by states in the international community.</td>
<td>1.59</td>
</tr>
<tr>
<td>Understanding the potential role of international organizations in resolving international disputes.</td>
<td>1.63</td>
</tr>
<tr>
<td>Understanding the interests pursued by States in the international arena.</td>
<td>1.37</td>
</tr>
<tr>
<td>Understanding the strategies that are used by organizations and States in pursuing their goals.</td>
<td>1.92</td>
</tr>
<tr>
<td>Identifying the leaders involved in the Kosovo crisis.</td>
<td>1.37</td>
</tr>
<tr>
<td>Identifying the issues involved in the Kosovo crisis.</td>
<td>1.34</td>
</tr>
<tr>
<td>Identifying the problems and pressures faced by leaders in pursuing their strategies.</td>
<td>1.37</td>
</tr>
<tr>
<td>Gaining knowledge about leaders.</td>
<td>1.61</td>
</tr>
<tr>
<td>Gaining knowledge about the crisis in Kosovo.</td>
<td>1.37</td>
</tr>
<tr>
<td>Understanding the uses of diplomacy in crisis and conflict situations.</td>
<td>1.37</td>
</tr>
<tr>
<td>Understanding the importance of alliances, the way they are maintained or threatened.</td>
<td>1.45</td>
</tr>
<tr>
<td>Understanding the effects of the media on the perception of the crisis in Kosovo.</td>
<td>1.74</td>
</tr>
</tbody>
</table>

On this scale, the average rating for questions relating to the understanding and identifying of facts, issues, problems and factors, was between 1.34 to 1.92 which is in the "very useful" to "useful" region.

It is interesting to note that on another question that the simulation added "active and dynamic dimensions to classroom learning processes", the average was an overwhelming 1.08 indicating that the students welcomed the new innovative learning environment.

Table 2 shows how the simulation was perceived by the students as an instrument for learning on a 4-point scale, where 1 is "strongly disagree" and 4 is "strongly agree".

Table 2. The simulation as perceived by the students

<table>
<thead>
<tr>
<th>Question</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>The simulation was instrumental in enabling me to carry out research on the Web in order to develop strategies appropriate to my assigned role.</td>
<td>3.39</td>
</tr>
<tr>
<td>The simulation was instrumental in enabling me to write position papers.</td>
<td>2.95</td>
</tr>
<tr>
<td>The simulation was instrumental in enabling me to evaluate different theories of international politics.</td>
<td>3.22</td>
</tr>
<tr>
<td>The simulation was instrumental in enabling me to evaluate the utility and effectiveness of strategies for pursuing national interests.</td>
<td>3.32</td>
</tr>
<tr>
<td>The simulation was instrumental in enabling me to understand the extent to which different theories are able to explain world politics.</td>
<td>3.16</td>
</tr>
<tr>
<td>The simulation was instrumental in enabling me to understand the effects of different assumptions underlying theories of world politics.</td>
<td>3.08</td>
</tr>
<tr>
<td>The simulation activity was useful in allowing participation in the learning activity by the entire class simultaneously and in our own time.</td>
<td>3.34</td>
</tr>
<tr>
<td>The simulation activity was useful in allowing an approach to the subject in its entirety rather than one bit of information at a time.</td>
<td>3.45</td>
</tr>
</tbody>
</table>

On the whole, students reported finding the simulation very useful in various ways. The issue about the writing of "the position papers" which is rated 2.95, is surprising as the initial position papers were written before the start of the simulation.
Time spent on the simulation

Most students suggested having spent a lot of time on the simulation. This is reflected in Figure 5.

![Figure 5. Time spent on the simulation](image)

The difference between time spent by those with Internet access at home and those without was subjected to a *t*-test which revealed a *t* value of 2.1447 (*df*=14) suggesting significant difference between those with Internet access at home and those without (*p*<0.05). Those with Internet access at home spent significantly more time on the simulation than those without. Due to the way the questionnaire was administered, it was not possible to link the time spent on the simulation with their overall performance on the subject.

Open-ended responses

Students were given the opportunity to comment more freely, among other things, on the usefulness of web-based simulation in supporting learning. Some of the responses to the critical implications of web-based collaborative learning are presented in the following.

*Question.* Would the use of a web-based simulation such as this influence your decision to take a course, if so why? If not why?
Sample Comments

Yes, because a simulation is an exciting way to learn a new subject and takes the brunt out of doing basic essays. However, having gone through one simulation, I do not think I will be raring to do another as I found that this simulation was exceedingly time consuming even though it was fun being involved in it.

Yes, all the concepts covered in the lectures were totally foreign to me before taking this class, I “learned” the theories but the simulation made me apply them so that I KNOW them now.

Previous to this course I would have been skeptical about simulation-based assessment, but having participated in one myself I would encourage anyone to do the simulation in the future.

A simulation would make a course more attractive by: a) being enjoyable and, more importantly; b) by making it necessary to apply everything one learns to get through, rather than get through a couple of questions on an examination.

I thought this process/project was fantastic. It was certainly the most fun I’ve ever had doing an assignment. I found it a great way to get a handle on the quite complicated issues involved in the Kosovo situation, and very useful in seeing the theories we studied play out (in my opinion the evergreen relevancy of realism was borne out again! :)). It also led to getting to know and interact with a wider range of students within the subject, rather than the one or two people that you know in your tutorial group. I know some people have complained about the amount of time involved, but I personally thought it was not at all excessive (2 hours a day absolute tops, usually much less). Certainly no less than a major essay or exam would take, and much more interesting. I also greatly enjoyed the chance to do something different from the interminable stream of research essays that the Arts Department asks for. Given my current ambition to work in the diplomatic corps (don’t laugh :)), I thought this was great! Best assignment I’ve done!

Conclusion

In this paper we have articulated the theoretical basis of a dynamic goal-based role-play simulation utilizing the collaborative learning capability of the Web. The subject of this simulation was World Politics in Transition. Results of the summative evaluation process have shown that the move from the traditional lectures (including seminars, tutorials, paper-based examinations, essay writing and reliance on printed books and articles) to this simulation significantly transformed the learning and teaching processes in this course in a number of ways. Although the students were not explicitly aware of the pedagogical design behind the simulation, the overall experience has been very positive. Firstly, it has brought students to the center of the learning process rather than putting them in passive and receptive roles. Secondly, it has transformed the way students and teachers carry out teaching and learning by emphasizing communication and collaboration rather than individual activity. Thirdly it has allowed for flexibility in the delivery of material in terms of the number of participants, the timing and spatial location of the teaching and learning process. And fourthly, it has taught everyone new skills and competencies, not only about teaching and learning but communication and collaboration. For the teaching academic, the simulation generator has transformed the previously tedious, and technically complicated process of creating a simulation in order to transform learning into a goal-directed and fun activity.

Acknowledgments

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Reference


Overview

Role play and simulations are forms of experiential learning (Russell & Shepherd, 2010). Learners take on different roles, assuming a profile of a character or personality, and interact and participate in diverse and complex learning settings.

The terms "role play" and "simulation" are sometimes used inconsistently or interchangeably. However, "simulations" often involve a familiar or realistic situation in which a participant's role may not be as prominent or distinctive as it would be in a role play. Frequently simulations incorporate role play, leading to the term "role-playing simulation". The difference is generally one of degree rather than kind.

Role plays and simulations function as learning tools for teams and groups or individuals as they "play" online or face to face. They alter the power ratios in teaching and learning relationships between students and educators, as students learn through their explorations and the viewpoints of the character or personality they are articulating in the environment. This student-centered space can enable learner-oriented assessment, where the design of the task is created for active student learning. Students are actively involved in both self and peer assessment and obtain sustainable formative feedback.

Video Series - Using Role Plays in Formative Assessment - Ben Barry & Gail Trapp

When to use

Good-quality learning design provides opportunities for situated and authentic learning. As Figure 1 indicates, high quality learning is situated in a real-life context and simulates the learning activities of the graduate's employment area.

Figure 1: eLearning opportunities to address principles of high-quality learning design (Wills, Leigh & Ip, 2011).

Boud & Prosser: Summary of Principles

| Engage learners               | Consider learners' prior knowledge and desires and build on their expectations. |
| Acknowledge learning context | Consider how the implementation of the learning design is positioned within the broader program of study for the learner. |
| Challenge learners           | Seek the active participation of learners, encouraging them to be self-critical. |
| Provide practice            | Encourage learners to articulate and demonstrate to themselves and their peers what they are learning. |

Siemens & Tittenberger: Summary of Principles

| Social                       | Learning is a social process and knowledge is an emergent property of interactions between networks of learners. |
| Situated                     | Learning occurs within particular situations or contexts, raising the importance of educational activities mirroring actual situations of use. |
| Reflective                   | Learners require time to assimilate new information. |
| Multi-faceted                | Learning incorporates a range of theory, engagement, "tinkering" or bricolage, and active construction. |
Authentic learning and task design provides students with:

- opportunities to reflect on the way knowledge will be gained in real life
- activities that are authentic in nature
- modelling of expert performances and processes
- the opportunity to learn about new perspectives and roles in life
- opportunities to reflect on learning.
- opportunities to see how tacit knowledge can be made explicit
- scaffolding and coaching at critical times in the learning and assessment process
- assessment that is aligned with learning objectives within the task.

Role plays and simulations significantly contribute to students’ learning and assessment when they allow students to view multiple perspectives on their responses in a safe but challenging environment.

Benefits

Widespread evidence suggests that educators and students experience satisfaction with assessment-as-learning through role play, games and simulation (Russell & Shepherd, 2010). Simulated learning environments (SLEs) provide a safe, supportive environment where students can develop their clinical skills, competency and agency.

SLEs are also flexible and controllable, and educators find they can design suitable and varied education events within them.

The blended learning environment can provide face-to-face students with a virtual classroom where students and educators can deliver content and interact in a simulated learning environment. This benefits both staff and students; it has, however, meant a shift in practice for the educator as the room changes to accommodate the required infrastructure and seating arrangements.

The benefits listed below are attributed to either role plays or simulations; however, some benefits can be attributable to both forms to some extent.

Benefits of assessing by role play

- Role play is an excellent means of evaluating decision-making and interpersonal communication skills.
- Role play is particularly useful to students who will operate in a tense professional environment (e.g. diplomacy, acute or sensitive medical care settings, psychology and counselling) or requires complex decision-making.
- Scenarios can be scaffolded, gradually increasing in complexity to ensure that students reach a sufficient level of competence.
- Role plays help you evaluate students’ ability to work under pressure and with others, including providing opportunities for inter-professional learning.
- With online SLEs, students can role play anonymously.

Benefits of assessing by simulation

- Simulation is a form of authentic assessment. When exposed to active, experiential, reflective and contextual learning approaches such as simulated environments, students can see the direct relevance of their educational experience to their future practice.
- Educators can assess a student’s preparedness for the practical placement component of their degree.
- Technology-based forms of simulation can enable instant feedback to students.
- Simulations are effective means of evaluating students’ competencies, such as their professionalism, as well as their content knowledge.
- In the medical and allied health literature, SLEs are consistently found to have 3 significant benefits. They:
  - promote an increase in self-efficacy in clinical decision making,
  - improve clinical communication skills, and
  - promote greater awareness in students of the role they play in a collaborative care setting.
Challenges

As with the benefits, the issues are listed here as characteristic of either role plays or simulations; however, some apply to both forms.

**Challenges of assessing by role play**

- Role plays are resource intensive and both costs and available time will constrain them. Constraints can be reduced by developing a bank of role play scenarios and sharing role play resources, as has been done with [Project enROLE](#). Many universities utilise shared training and evaluation centres in the fields of medicine and allied health. You can reduce the setup cost of role plays by utilising the university platform. You can also use many learning designs that are distributed online at no cost.
- A new platform for learning, requiring students to learn new skills just to participate in the learning, can distract them from the conceptual learning the role play was intended to promote.
- Institutional Learning Management Systems that require students to tick a box to ensure that each of their posts is anonymous can compromise student anonymity.

**Challenges of assessing by simulation**

- For students who struggle with public speaking or group participation, simulation assessments can create so much anxiety that it affects their performance or participation.
- It is impossible to genuinely recreate authenticity in a simulated environment. The most you can do is use different aspects of simulation to cater to the assessment needs of the students.
- Students need to be guided throughout a simulation, and learning must be scaffolded.
- It is advisable to flag the timing of simulations with your colleagues, as preparing for a simulation can prevent students from completing other learning and assessment work.
- Setup costs can be significant.
- Staff and students’ accessibility can present challenges during simulation setup.
- Facilitators sometimes need to invest significant time learning the tools required to develop a simulation, to track and structure activity and to monitor and communicate with students during simulations. This investment can only benefit their teaching, but expect time-pressed teachers to be resistant at first.

**Strategies**

When assessing role plays and simulations, we recommend that you:

- align the task with the learning outcomes and structure it accordingly
- provide clear and explicit information as to what is expected of students
- ensure that the task is authentic and real-world based
- scaffold the learning experience, breaking tasks down to manageable size
- use both formative feedback and summative assessment.

Once debriefing sessions have been held, evaluate the learning design. Gredler (1996) suggests using a 3-step evaluative procedure to redesign a role play or simulation:

1. Document the design validity of the innovation.
2. Verify the cognitive strategy and the social interactions using formative feedback and redesign them where needed.
3. Conduct follow-up evaluation and research on specific processes and effects of the learning and assessment.

**Role play**

Online role play is described by [Project EnROLE](#) as having the following characteristics (Wills, Leign & Ip, 2009):

- It is designed to increase understanding of real-life human interactions and dynamics.
- Participants assume someone else’s role or place themselves in someone else’s situation.
Participants undertake authentic tasks in an authentic context.

- The task involves substantial in-role interaction with other roles for collaboration, negotiation and debate.
- Interaction between roles takes place substantially online.
- Learning outcomes are assessable and generate opportunities for student reflection.

These characteristics can also aid in setting up the face-to-face learning environment of a role play or simulation.

As Figure 2 demonstrates, adaptive learning in role plays includes modelling and input from students that can alter the learning outcomes. These disciplines can utilise this type of active and adaptive learning and can film it for evaluation (including peer- and self-evaluation). Actors can be used to perform the role of a patient or client, so that students’ communication and clinical decision-making skills can be explored. Actors are usually trained in the details of a case, in the array of issues and behaviours a patient or client is likely to present to the health professional, and to replicate the performance from student to student to ensure standardisation of assessment. Studies have shown the level of standardisation achieved is usually very high.

In the following table, Siemens and Tittenberger (2009) outline the ways in which you can use role play with other experiential learning. They enumerate the opportunities that role-based eLearning provides for high-quality learning design and the tools that can be integrated into the learning experiences. The elements of design for authentic eLearning specified by Lombardi (2007) include basing a learning task on real-life problem solving, within a meaningful context. Online role plays embody Lombard’s suggestion that a learning task provide long-term student engagement with learning, involve a variety of resources and perspectives over a sustained period of time, and entail collaborations to promote engaging, open conversation.

Figure 2: Role play in comparison with other experiential learning activities (Wills, Leigh & Ip, 2011, modified from Siemens & Tittenberger, 2009).

<table>
<thead>
<tr>
<th>Type of learning activity</th>
<th>What is it?</th>
<th>Media forms</th>
<th>Technique</th>
<th>Technologies</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assimilative</td>
<td>Processing narrative media—managing and structuring information</td>
<td>Lectures, DVDs or reading texts</td>
<td>Concept mapping, brainstorming, buzzwords, crosswords, defining, mind maps, web search</td>
<td>Word processing software, presentation software, text, image, audio, video</td>
<td>CMAP, Hot Potato, Google, MS Office products, social bookmarking, blogs, wikis, pageflakes, Google reader</td>
</tr>
<tr>
<td>Adaptive</td>
<td>An environment that changes according to learner input</td>
<td>Simulations, games</td>
<td>Modelling</td>
<td>Virtual worlds, models, simulations, games</td>
<td>Second Life, MMORPG</td>
</tr>
<tr>
<td>Communicative</td>
<td>Discussing</td>
<td>Asynchronous or synchronous discussions, chats, text messages</td>
<td>Reasoning, arguing, coaching, debate, discussion, negotiation, performance</td>
<td>Electronic whiteboards, email, discussion boards, chat, instant messaging, VOIP, videoconference, web conferencing, blogs, wikis</td>
<td>Online bulletin board, Skype, IM, Facebook, social bookmarking, blogs, wikis</td>
</tr>
<tr>
<td>Productive</td>
<td>Learners producing something</td>
<td>Creating, producing, writing, drawing, composing, synthesising, remixing, mashups</td>
<td>Artefact, book report, thesis, essay, exercise, journaling, literature review, multiple choice questions, puzzles, voting portfolio, product, test</td>
<td>Creative applications (image editing, CAD, design software) computer-aided assessment tools, electronic learning environments</td>
<td>Indesign, Photoshop, YouTube, Google Video, Office software, Sketch</td>
</tr>
</tbody>
</table>
Online role play/simulation

Important steps in the process:

1. Design the problem.
2. Design the rules and roles.
3. Set up the scenario.
4. Assign student roles.
5. Consider the practical limitations of playing out the simulation, and make adjustments to the task design as necessary.
6. Develop moderation and other necessary skills.
7. Assess the technological requirements and develop them as necessary.
8. Assist in developing students' skills in asynchronous posting online.
9. Develop students' understanding of the "story" that accumulates as they post.
10. Develop their skills in reflective practice; use a blog, journal or wiki space during the role play or simulation, and afterwards to assess students' participation and to evaluate the role play or simulation as a learning experience.

Games

You can use role play and simulation within a game, or use a game within a role play or simulation. Games are engaging, can be highly authentic and can incorporate a competitive element, up to and including advancement to the next stage or problem, or winning a prize at the conclusion of the game. Game feedback is generally immediate, reinforcing the student's application of subject matter knowledge.

The success of using games in learning relies on the application of strict rules. In the academic setting they should meet 2 requirements (Gredler, 1996):

- Random factors should not contribute to winning.
- Winning should depend on the application of knowledge of the subject matter.

Games have 4 general purposes in learning and assessment, says Gredler:

- for practice and refinement of skills
- to aid in identifying gaps or weaknesses in knowledge
- for review or evaluation
- to learn new ways of investigating concepts and principles in the learning of problem-solving skills.

Crookall and Saunders (1989) view academic games as a simulation—a representation of an authentic real-world system that can itself take on some aspects of reality for participants or users. Games are useful tools as feedback responses for students; a key characteristic of game learning is that one cannot progress to the next stage of a game without gaining the knowledge to accomplish the requisite task. Groups as diverse as the American military and the National Association of Home Builders in the United States invest in games that represent and instruct their particular content and views (Squire, 2006). "Serious games" such as the US Army's America's Army are designed to impart their content by immersion of the players in game-playing activities.

Simulations

Simulations have the "potential to develop students' mental modes of complex situations as well as their problem solving strategies" (Gredler, 1996). You can use experiential simulations in a number of strategic ways for groups or individual students, and assess them using various techniques. Some examples of simulations are:

- data management—often team-oriented and containing variables that are manipulated
• diagnostic and crisis management—cause and effect contingencies are drawn from real cases; experts aid in the working through of the task.
• social-process—These simulations require the learners to personally interact with the situations, and can have unexpected outcomes.

Experiential learning that focuses on the interactive activities of problem solving fits with Kolb’s experiential learning cycle (Kolb 1984). Kolb differentiates learners according to which feature of the experiential learning cycle they prefer: concrete experience, active experimentation, reflective observation or abstract conceptualisation. Kolb (1984) developed this concept of the learning process to “ensure that teaching and tutoring activities give full value to each stage of the process. This may mean that for the tutor or mentor, a major task is to ‘chase’ the learner round the cycle, asking questions which encourage reflection, conceptualization, and ways of testing the ideas” (Atherton, 2010).

Assessing simulations

• In the course outline, give students adequate warning of the workload requirement for the simulation. This gives them a chance to opt out if their current load is already heavy.
• Arm students with the required content.
• Have them work on a position paper and an objective sheet from the initial stages.
• Conduct surveys before and after the simulation, and implement a debrief questionnaire.
• Dedicate the final class to debriefing the students about the process and evaluating the learning within the simulated environment.

Virtual reality and other online learning tools

Virtual reality and other online tools can play an important role in both online teaching and simulated environments. They provide what Russell and Shepherd (2010) referred to as optimal elements of learning design, a complex social learning space and reflective practice.

Educators commonly combine these simulated environments for assessment. For example, combining a part-task trainer within a role play scenario, or a DVD can create a high-fidelity simulation environment.

Low-fidelity SLEs such as case studies and role-plays are being overlooked “despite an established base of research to support their effectiveness”. Published research does indicate that higher fidelity is better; however, the effectiveness of any simulation technology depends on how it is used (Beaubien & Baker, 2004, 55).

High- and medium-fidelity mannequins

Mannequins are commonly used by medical and allied health disciplines to assess clinical competency, such as self-confidence, clinical judgment, interpersonal communication and inter-professional teamwork. More common to the medical and allied health disciplines are part-task trainers, which utilise anatomical models or computer software models that replicate a specific physical intervention; for instance, a spinal simulator to assess physiotherapy students’ ability to perform passive oscillatory movements.

Case studies

Video series - Role Plays: Case Studies from UNSW

Additional information

External resources

• Online simulations: Harvard Business for Educators
• Project enROLE: encouraging role based online learning environments
• Resources from Project enROLE
Further readings


**Acknowledgments**

The contributions of staff who engaged with the preparation of this topic are gratefully acknowledged.
The Impact of Simulations on Higher-Level Learning

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ABSTRACT
Often, political science, public policy, and public administration course objectives include statements regarding increasing responsible citizenship, developing a continued interest in public affairs and policy, building the capacity to integrate the course material to develop policy arguments, and fostering the ability to apply the theoretical concepts to “real life” situations. These objectives are beyond simple recall and comprehension and are often referred to as higher-level learning. However, the traditional pedagogical techniques of assigned readings, lectures, tests, and papers often fail to replicate the “real world.” As a result, some have turned to role-playing simulations to help achieve their course objectives. While the benefits of role-playing simulations are often touted, there is a dearth of empirical evidence to support this assertion. A survey of nearly 200 students in four sections of an entry-level course in urban policy is used to examine this gap in the teaching and learning literature and attempts to uncover the impact of multisession classroom role-playing simulations on higher-level student learning. The results of this study suggest that role-playing simulations are an effective means to give students the opportunity to engage in higher-level learning.

“One must learn by doing the thing, for though you think you know it—you have no certainty until you try.”

—Sophocles (495–406 BCE)

Over the past few years, many college campuses around the country have moved toward the use of innovative teaching techniques to improve student learning. One of the most commonly used techniques has been active learning, which has been defined as “anything that involves students in doing things and thinking about the things they are doing” (Bonwell & Eison, 1991, p. 2). This
movement has been spurred on by the thought that “genuine learning” is the result of the student’s active engagement in the learning process and not merely their passive absorption of what is being taught (Alder, 1982). Proponents argue that the incorporation of active learning activities (e.g. hands-on activities, role plays, group projects, peer-led learning, and simulations) better help an instructor “create a lesson plan that maximizes student learning, encourages critical thinking, aids information retention, and allows students to apply key concepts and knowledge gained through readings and lecture to real (or realistic) problems” (Raines, 2003, p. 432).

Further, it has been argued that active learning techniques help bridge the lecturer-listener divide. In a traditional lecture, the students passively listen while the professor actively lectures (Bonwell, 1996). This approach places more focus on the teacher’s teaching than on the students’ learning (O’Leary, 2002). Since individual students “process information, learn concepts, and solve problems in different ways” (Brock & Cameron, 1999, p. 251), all of the students in the classroom may not be able to grasp the material through merely hearing a lecture. The standard lecture format may in fact only help those students to learn the intended material who “learn auditorially, have a high working memory capacity, have all the required prior knowledge, have good note-taking skills, and are not susceptible to information-processing overload” (Johnson, Johnson, & Smith, 1991, p. 89). Further, some contend that lectures are “not suited for teaching higher orders of thinking such as application, analysis, synthesis or evaluation” (Bonwell, 1996, p. 32). Thus, using active learning activities in the classroom has become a popular teaching technique because such activities are designed to engage students actively in their own learning (Campbell & McCabe, 2002) and are more effective alternatives to the traditional lecture/discussion approach whereby students take a passive role in their own learning process (Poling & Hupp, 2009).

While much of the literature on the scholarship of teaching and learning suggests that students will comprehend better, retain longer, and become more interested in the material when active learning techniques are used (Bonwell, 1996; Fink, 2003; Poling & Hupp, 2009), a healthy debate continues over whether active learning techniques are of value. Some are skeptical that the juice is worth the squeeze, for they see too many barriers to usage to justify its incorporation. Such barriers include concerns that the preparation time required to conduct these activities is too onerous (Crawford & Machemer, 2008; Faria & Wellington, 2004; Killian & Brandon, 2009), that active learning activities make it harder to cover the required course material (Killian & Brandon, 2009; Michelsen, Knight, & Fink, 2004), that the amount of class time taken up by active learning activities is too great (Faria & Wellington, 2004), and, finally, that these activities simply do not work as they were intended to work (Powner & Allendoerfer, 2008).
However, perhaps the largest point of contention raised by those who question the utility of active learning activities is the lack of empirical evidence that these techniques really work (Gosen & Washbush, 2004; Krain & Lantis, 2006; Rochester, 2003). The answer to this question is difficult to assess because of the difficulty in determining what works means. As Rochester counsels, “Rather than offering ringing endorsements of the latest innovations and sweeping indictments of old-fashioned techniques, we should engage in research that specifies what learning outcomes are maximized under what circumstances for what clienteles” (2003, p. 434). In other words, instead of flocking blindly toward an approach that is an unproven panacea, professors need to apply the research skills that we hone in our individual disciplines to our teaching to see if what many think works really does work.

ROLE-PLAYING SIMULATIONS AS AN ACTIVE LEARNING TECHNIQUE

Experiential learning activities have been a commonly employed pedagogical tool for centuries. The physical sciences have had laboratory sessions, language classes have included role-playing exercises, and the health sciences have held mock-ups, all of which were designed to allow the student to use and apply what was read or presented in class. With the lectures and/or readings as a foundation, many of these experiences were intended to crystallize the students’ understanding of the material. For example, since the relationship between force, mass, and acceleration is often not intuitive, many physics courses include a lab session where students manipulate these three parameters and prove to themselves that force is equal to mass times acceleration.

Whereas classes in the physical sciences reinforce and build upon the concepts and theories taught in lecture with opportunities to experiment in a laboratory setting, courses in the social sciences often do not include similar, hands-on learning opportunities. This lack of an active learning experience may be particularly problematic in the political science, public policy, and public administration classrooms, for students in these disciplines must often grapple with the conflicting facts and values that are common in public policy debates and throughout the policy process in the real world. Since pure laboratory experiments in many disciplines are not possible or ethical, instructors in these fields have turned to simulations as ways to allow students a laboratory-like experience.

Simulations vary widely in their length—some last only 5 to 10 minutes (Davis, 2009), and others are held over multiple class sessions (Woodworth, Gump, & Forrester, 2005). Additionally, the format of simulations ranges from computerized games to elaborate, role-playing scenarios (Moore, 2009). While not all simulations involve role playing, for the purposes of this paper, the terms role playing, role-playing simulation, and simulations are used synonymously to refer to active learning techniques in which students try to “become another individual and, by assuming the role, to gain a better understanding of the person, as well as the actions and motivations that prompt certain behaviors… [and] explore their [own] feelings” (Moore, 2009, p. 209).
“Simulations give students the chance to apply theory, develop critical skills, and provide a welcome relief from the everyday tasks of reading and preparing for classes” (Kanner, 2007). An additional benefit of many of these simulations is the introduction of an aspect of realism into the students’ experience. Such simulations are historically seen in the medical fields, where mock-up patients take on the signs and symptoms of a certain disease or injury and the student is asked to assess, diagnose, and/or treat the “patient.” Here the students must apply what they have learned to a reasonably realistic scenario. Further, there is evidence that the experiential learning that occurs in role-playing simulations promotes long-term retention of course material (Bernstein & Meizlish, 2003; Brookfield, 1990).

Increasingly, public administration, public policy, and political science courses are turning toward simulations and role playing to help their students both better understand and apply the material. Simulations have been used in courses such as international relations (e.g., Shellman & Turan, 2006), negotiations (e.g., Kanner, 2007), constitutional law (e.g., Fliter, 2009), comparative politics (e.g., Shellman, 2001), professional development (e.g., Wechsler & Baker, 2004), economics (e.g., Campbell & McCabe, 2002), human resource management (e.g., Dede, 2002; Yaghi, 2008), leadership (e.g., Crosby & Bryson, 2007), and American government (e.g., Caruson, 2005).

Frequently, the learning objectives in these courses include statements regarding increasing responsible citizenship, developing a continued interest in public affairs and policy, building the capacity to integrate the course material to develop policy arguments, and fostering the ability to apply theoretical concepts to real-life situations. Many professors want their students to be able to apply the “book knowledge” to the real world, to see how the abstract concepts and theories play out in the real world, to be able to experience real-world processes, and to become motivated to become involved in the real-world processes that are discussed in class. Scholars have claimed that simulations achieve all four objectives (see Brock & Cameron, 1999; Campbell & McCabe, 2002; Shellman, 2001; Smith & Boyer, 1996, respectively) because they place the students in roles where they are asked to apply what they have learned previously in order to “exercise judgment,…enlarge their analytical capacity” (Moreno, 2007, p. 85), “make decisions, solve problems, and react to the results of their decision” (McKeachie & Marilla, 2006, p. 226). The aforementioned objectives are beyond simple recall and comprehension and are what Bloom (1956) referred to as higher levels of student learning. However, the traditional pedagogical techniques of assigned readings, lectures, tests, and papers often fail to replicate the real world in that these traditional learning experiences frequently do not require the students to integrate, synthesize, and apply the course material in realistic situations. Simulations, on the other hand, put students in realistic situations that allow them to participate affectively, behaviorally, and cognitively (Blanchard & Donahue, 2007) and, in so doing, may assist students in engaging in higher-level learning.
As mentioned previously, there is an ongoing debate in academia regarding the effectiveness of simulations and other active learning techniques. This paper contributes to a growing body of relevant literature by looking at the impact of a simulation on different kinds of learning as categorized by Bloom (1956). Bloom’s taxonomy of cognitive learning consists of six hierarchically ordered levels. From lowest to highest, the six kinds of learning are as follows:

1. **Knowledge**: the ability to recall the appropriate facts, data, and information. Knowledge includes activities such as defining, describing, identifying, and the like.

2. **Comprehension**: the ability to understand the meaning of information. Comprehension includes activities such as citing, explaining, giving examples, summarizing, generalizing, and so on.

3. **Application**: the ability to use concepts and information in a new situation. Application includes activities such as applying, constructing, predicting, solving, and so on.

4. **Analysis**: the ability to break information down into components in order to better understand the issue, draw conclusions, and make inferences. Analysis includes activities such as analyzing, comparing, contrasting, distinguishing, and so on.

5. **Synthesis**: the ability to bring the different aspects of an issue together in order to understand the big picture. Synthesis includes activities such as formulating, integrating, negotiating, and so on.

6. **Evaluation**: the ability to make a judgment about the value of concepts and ideas based upon personal values/opinion in the absence of a real right/wrong answer. Evaluation includes activities such as concluding, deciding, defending, judging, supporting, and so on.

Simulations do not necessarily test the students’ ability to recall factual information or summarize previously learned course content. Instead, the simulation requires students to apply the course content to a new, relatively realistic context in order to weigh policy alternatives, draw upon the various course components in order to formulate an argument, and make judgments regarding the “best” alternative. Therefore, this study does not examine the direct impact of the simulation on knowledge or comprehension. Instead, it focuses solely on Bloom’s four higher-level learning categories.

While Bloom’s taxonomy is well established, it does not address many of the learning objectives that are commonly seen as important in the public affairs classroom. As mentioned previously, instructors seek to motivate future civic engagement, to assist their students in formulating their own opinions on public issues while at the same time helping them to appreciate the opinions of others, and to pique the students’ interest in public affairs. Bonwell (1996) argues that while student attitudes toward the field of study are often not central...
to the course, they are likely indicative of future engagement in the field. “Most of us would like students to appreciate our disciplines [and] to understand that they can be exciting, enjoyable and perhaps even fun” (Bonwell, 1996, p. 41).

Unfortunately, learning to be active in the community, learning about yourself and others, and learning that you want to learn more are not captured in Bloom’s taxonomy. Therefore, it is necessary to consider additional types of learning.

Fink (2003) similarly saw the deficiencies in Bloom’s taxonomy. As a result, he developed his own framework for understanding student learning, which he referred to as a “taxonomy of significant learning.” While this paper does not adopt Fink’s taxonomy in its entirety, three of his major categories of significant learning—namely, the human dimension, caring, and learning how to learn—are incorporated in this study. The human dimension includes learning about oneself and about others. In so doing, students “discover the personal and social implications of what they learned…, [gain] a new understanding of themselves…, [and] acquire a better understanding of…how and why others act the way they do or how [they] can interact more effectively with others” (Fink, 2003, p. 31). Caring involves developing an increased interest or concern for something. Role-playing simulations may be particularly useful in facilitating the learning of these dimensions because they give students the opportunity to “explore their feelings [and] gain insights into the perceptions and attitudes of others” (Moore, 2009, p. 209). Finally, learning to learn is the process of becoming a self-directed learner. The interactive debate aspect of role-playing simulations may encourage the development of this category of higher-level learning by motivating students to learn more about the course material so that they more clearly understand their position on the issue and can make an informed decision regarding it (Dougherty, 2003).

**CONTEXT OF THE STUDY**

During the fall 2009 semester, three instructors in four sections of an urban policy course at a large public university in the Midwest used the simulation *Camelot: A Role-Playing Simulation for Political Decision Making* (Woodworth et al., 2005). *Camelot* is a multi-role, multisession simulation in which students are assigned to play either a city council member, planning commission member, or a citizen role. The course is designed to get students interested in public affairs and give them a broad exposure to urban policy issues. In addition to being an “attractor course,” it also serves as a “gateway course” in that students must either take it or one of three other courses before applying for matriculation into one of the bachelor’s programs in the school.

Although the syllabi for the urban policy courses included in this study were slightly different, they all followed the same general structure. The semester was divided into three sections. Since this was the first public affairs course for most of the students, the first section of the course was devoted to foundational material,
including forms of government, municipal finance, planning, economic development, and the like. The second section of the course delved into different policy areas, such as housing, crime, education, immigration, poverty, and so on. As a sort of capstone experience, the final section of the course was a 6-day simulation.

In advance of the simulation, the students were asked to read through the set of issues included in the text. These issues dealt with land use and planning, economic development, crime, and so forth. Also, each member of the class was assigned a unique role based on their interests, preferences, and personality. The Camelot simulation includes a short three- or four-sentence description of each role that includes information regarding the role’s age, family status, neighborhood, and occupation. The description also includes statements regarding each role’s position on a few, but not all, of the issues. Based on their role’s description and/or their own personal opinion, the students were encouraged to develop a stance on the issues for which their role’s description was silent. The book neither gave specific details regarding why certain roles had the stance that they were assigned nor gave explicit things to say during the simulation. For example, the role description for the Director of the Camelot Art Museum reads as follows:

Lives in an expensive condominium near the university. Last member of Camelot’s founding family. His/her great-great-grandfather was first preacher of the First Presbyterian Church; family plot is in that cemetery. Educated in eastern schools; travels yearly to Europe. Believes no one should censor art. Collects art prints. Strongly opposed to the proposal to eliminate city financial support for the art museum (see “Obscene Photographs” Issue). On the Rights of a Home Owner Issue, will take a stand appropriate to the role description. (Woodworth et al., 2005, p. 191)

While the descriptions did give the students some guidance regarding the opinions and background of the roles they were assigned, what was said during the simulation was solely the result of the thoughts of the students playing the roles. For example, even though the student playing the director of the art museum was told that he or she was against the proposal to eliminate funding, that student had to independently construct an argument that would both counter the arguments of the students whose roles held the opposing position as well as convince the city council to continue supporting the museum. On the other issues that were brought before the city council, including the Rights of the Home Owner Issue, the student playing the art museum director had to determine what was the appropriate stand based on the role description. This format forced the students to think about why their role felt the way it did and to be creative in how they argued their perspective.
The class period before the start of the simulation was devoted to discussing the simulation. This preparatory session involved explaining the format of the simulation and answering any questions the students might have as well as discussing the pedagogical purposes of including the simulation in the course. Such a discussion is important in alleviating student concerns and explaining the educational benefits they can expect from the simulation experience (Brookfield, 1990). Also, before starting the simulation, the students were asked to write a two- to three-page “role paper” explaining who their role was, what stance they thought they would take on the issues, how they intended to argue their case, and how they planned to interact with the other roles. This assignment was implemented to encourage students to be more thoroughly prepared for the first day of the simulation and think about the issues before they were discussed.

Much like a real city council and planning commission meetings, during the simulation, policy issues were introduced before the city council or planning commission, the floor was open for public comment, and the city council/planning commission would comment and then vote. Once the final vote was taken, the instructor led a short discussion to highlight specific aspects of the issue or debate and to answer any questions the students might have. This discussion gave the instructor an opportunity to highlight some of the key concepts that came out during the simulated debate and ask the students questions regarding their interpretation of what just happened, their opinions and feelings regarding both the debate and the outcome of the city council vote, and their rationale for their actions during the simulation (Brookfield, 1990). After that discussion, a new issue was debated. Generally, the class would work through two to three issues during the 1-hour, 15-minute class session. Between simulation sessions, the students were assigned to write a reaction paper wherein they reflected on what happened during the simulation session; why things occurred the way they did; whether they agreed with the city council’s decision; what they thought would be the ramification of that decision; why they felt the way they did; and finally, whether their personal opinion was similar to their role’s opinion. Students were graded on their simulation role paper, their participation in the simulation, and on the simulation reaction papers. Grades were assigned to these various aspects of the simulation as a way to motivate the students to participate and put forth their best effort (Kirlin, 2005).

Sample

Of the 217 students who were enrolled in the four sections of the urban policy course, 198 (91.2%) participated in this study. The average age of the respondents was 20.2 years old, and slightly more than 62% of those surveyed were male. Most of those enrolled in the course were either sophomores (39.2%) or juniors (33.8%). Sixty-eight percent of the students had declared public affairs or a public affairs subfield as their major, 25.3% had declared a non-public-affairs field (i.e., business management, political science, humanities, social science, etc.), and 6.5% had not yet declared a major (see Table 1).
Table 1.
Demographic Characteristics

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<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
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<tbody>
<tr>
<td><strong>Gender&lt;sup&gt;1&lt;/sup&gt;</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>73</td>
<td>38.6%</td>
</tr>
<tr>
<td>Male</td>
<td>116</td>
<td>61.4%</td>
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<tr>
<td><strong>Age (years)&lt;sup&gt;2,3&lt;/sup&gt;</strong></td>
<td></td>
<td></td>
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<tr>
<td>18</td>
<td>23</td>
<td>12.4%</td>
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<tr>
<td>19</td>
<td>43</td>
<td>23.1%</td>
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<tr>
<td>20</td>
<td>63</td>
<td>33.9%</td>
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<td>21</td>
<td>28</td>
<td>20.4%</td>
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<tr>
<td>22</td>
<td>10</td>
<td>5.4%</td>
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<tr>
<td>23</td>
<td>4</td>
<td>2.2%</td>
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<tr>
<td>Over 23</td>
<td>5</td>
<td>2.7%</td>
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<tr>
<td><strong>Class Standing&lt;sup&gt;4&lt;/sup&gt;</strong></td>
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<tr>
<td>Freshman</td>
<td>37</td>
<td>19.6%</td>
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<tr>
<td>Sophomore</td>
<td>74</td>
<td>39.2%</td>
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<tr>
<td>Junior</td>
<td>64</td>
<td>33.9%</td>
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<tr>
<td>Senior</td>
<td>14</td>
<td>7.41%</td>
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<tr>
<td><strong>Major&lt;sup&gt;3&lt;/sup&gt;</strong></td>
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<tr>
<td>Public Affairs</td>
<td>47</td>
<td>25.3%</td>
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<tr>
<td>Undeclared/Undecided</td>
<td>12</td>
<td>6.5%</td>
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<tr>
<td><strong>Previous simulation experience&lt;sup&gt;5&lt;/sup&gt;</strong></td>
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<td></td>
</tr>
<tr>
<td>Yes</td>
<td>35</td>
<td>18.4%</td>
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<tr>
<td>No</td>
<td>155</td>
<td>81.6%</td>
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Notes. 1. n=193  
2. Mean = 20.2; st. dev. = 2.2  
3. n= 186.  
4. 189.  
5. n = 190

**Method**
To assess the impact of the simulation on the students’ learning, students were given a survey (see Table 2) at the conclusion of the last simulation session. The survey consisted of three sections. In the first section, the students were asked to complete three free-response questions. The questions were posed to elicit the students’ comments and opinions regarding what they learned during the simulation. The second section of the survey included 20 questions, ranging...
from questions about what students learned during the simulation to their opinions of the simulation in general. The respondents answered these questions using a 5-point Likert Scale. The points on the scale were labeled “Strongly Disagree,” “Disagree,” “Neutral,” “Agree,” and “Strongly Agree.” Eleven of the 20 questions from this section of the survey were designed to comport with the learning categories described earlier (see Table 3). Finally, in the third section, the students were asked demographic questions, including the simulation role they played, gender, age, class standing, major, GPA, and experience in previous simulations.

Table 2. 
Survey Questions

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<td>1.</td>
<td>What do you consider to be the most important thing(s) you learned from the simulation?</td>
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<td>2.</td>
<td>Did your participation change how you view government and how you envision yourself interacting with government in the future? If so, how?</td>
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<td>3.</td>
<td>Were the simulation debates effective in allowing you to see the point of view of others? Explain.</td>
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Likert Scale Questions*

| 4. | I enjoyed the simulation. |
| 5. | I thought the simulation was a valuable learning experience. |
| 6. | The simulation gave me an opportunity to apply what I had learned in class. |
| 7. | The simulation gave me the opportunity to make judgments about different policy solutions. |
| 8. | The simulation helped me realize that I had learned a lot in this class. |
| 9. | The simulation allowed me to apply the concepts discussed in lecture. |
| 10. | I was able to develop an argument for my position on the issues in the simulation. |
| 11. | I took a leadership role in arguing a position during the simulation. |
| 12. | The simulation forced me to confront the trade-offs between different policy perspectives. |
| 13. | I felt comfortable participating in the simulation. |
| 14. | I feel the simulation helped me to become sensitive to the perspectives of others. |
| 15. | I think I will be a more engaged citizen after having participated in the simulation. |
| 16. | The simulation helped me become excited about the issues debated and discussed. |
| 17. | The simulation made me want to learn more about the urban issues in the future. |
| 18. | The simulation helped me to think through the policy issues facing cities. |
| 19. | I was able to draw on different topics discussed during the semester to develop argument during the simulation. |
| 20. | I think my experience in the simulation will be useful in the future. |
| 21. | The simulation helped me learn about myself and my opinions on issues. |
| 22. | The simulation enhanced my learning of urban issues. |
| 23. | The simulation enhanced my learning of how government works. |
Demographic Characteristics Questions

24. Please indicate whether your role was:
   1) A city council or planning commission role
   2) A concerned citizen

25. Are you:
   1) Female
   2) Male

26. Age

27. Please indicate your class standing:
   1) Freshman
   2) Sophomore
   3) Junior
   4) Senior

28. Please indicate your major:

29. Please indicate the grade you anticipate in this course:

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30. Please indicate your overall GPA:

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<tr>
<th></th>
<th>1) 3.7–4.0</th>
<th>2) 3.3–3.69</th>
<th>3) 3.0–3.29</th>
<th>4) 2.7–2.99</th>
<th>5) 2.3–2.69</th>
<th>6) 2.0–2.29</th>
<th>7) 1.7–1.99</th>
<th>8) 1.3–1.69</th>
<th>9) Less than 1.29</th>
</tr>
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</table>

31. Have you ever been involved with a simulation before?

32. Which section of the course were you enrolled in?

* Responses were labeled “Strongly Agree,” “Agree,” “Neutral,” “Disagree,” and “Strongly Disagree.”

Surveying the students and asking them to reflect upon and self-assess the impact of the simulation on their own learning is thought to be the most appropriate approach to understanding the impact of the simulation on higher-level learning. Objective measures, such as simulation performance, have been shown to be poor measures of learning (Gosen & Washbush, 2004). Also, testing is problematic in that some critical aspects of higher-level learning, such as learning about yourself and others (human dimension) and caring, are difficult concepts to assess. As Gosen and Washburn state:
Learning is an internal mental process, and what is learning and how it is learned is unique for each individual. To create an instrument able to capture what is actually learned is easier said than done [since] learners have to be motivated to express their learning, and an instrument applied at the experience’s end, even for a grade, may be neither a proper vehicle for that expression nor sufficiently motivating. (2004, pp. 284–285)

Although numerous studies have relied on student perceptions of learning during a simulation, most have focused on the students’ general impressions of the simulation and whether the students enjoyed the simulation. None to date are known to have focused on perceptions of higher-level learning.

Table 3.
Survey Questions Regarding Higher-Level Learning

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
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</thead>
<tbody>
<tr>
<td>The simulation gave me an opportunity to apply what I had learned in class.</td>
<td></td>
</tr>
<tr>
<td>The simulation gave me the opportunity to make judgments about different policy solutions.</td>
<td></td>
</tr>
<tr>
<td>I was able to develop an argument for my position on the issues in the simulation.</td>
<td></td>
</tr>
<tr>
<td>The simulation forced me to confront the trade-offs between different policy perspectives.</td>
<td></td>
</tr>
<tr>
<td>I feel the simulation helped me to become sensitive to the perspectives of others.</td>
<td></td>
</tr>
<tr>
<td>I think I will be a more engaged citizen after having participated in the simulation.</td>
<td></td>
</tr>
<tr>
<td>The simulation helped me become excited about the issues debated and discussed.</td>
<td></td>
</tr>
<tr>
<td>The simulation made me want to learn more about the urban issues in the future.</td>
<td></td>
</tr>
<tr>
<td>The simulation helped me to think through the policy issues facing cities.</td>
<td></td>
</tr>
<tr>
<td>I was able to draw on different topics discussed during the semester to develop arguments during the simulation.</td>
<td></td>
</tr>
<tr>
<td>The simulation helped me learn about myself and my opinions on issues.</td>
<td></td>
</tr>
</tbody>
</table>

As with any survey, there is the threat of bias. Anytime the data is collected at the same time, in the same context, using a single source or via a single collection method, common source/method bias may occur (Friedrich, Byrne, & Mumford, 2009). To guard against this, the survey instrument used to collect the data for this study was designed in accordance with many of the recommendations put forth by Podsakoff, MacKenzie, & Podsakoff (2003). Namely, the anonymity of the respondents was protected. No identifying information was collected, and a third party—not the instructor—administered, collected, and maintained the surveys until after final grades were submitted. Further, the surveys were administered on the final day of the semester, and the course sections involved in this study did not have a final exam. Therefore both the timing and anonymity of the survey minimized the threat of social desirability bias.
Findings

The 11 learning questions used in this analysis were organized according to learning categories described earlier. Table 4 presents information regarding the category to which they were assigned, the frequency data for the responses to each of these questions, and the mean response for each question. The means for the 11 questions range from 3.85 to 4.37, indicating that most of the students had a favorable opinion of the simulation’s impact on their higher-level learning. That being said, there is variability among the data, suggesting that students considered their responses to the questionnaire and did not indiscriminately select responses or simply select one response for all questions.

The question regarding the simulation as an opportunity for the student to apply what he or she had learned in class clearly conforms to Bloom’s (1956) application category. Eighty-eight percent of the students reported that the simulation did in fact help them apply the concepts learned in class to “real” situations. This finding was also seen in the comments that students wrote in response to the first open-ended question. One student commented, “I learned how to group/use everything I’d learned from the semester and apply it to a ‘real-life’ situation” (Student 310). Another student noted, “I learned there is more to municipal planning [and] public policy than what was in our text book…issues are never as clear cut as a textbook makes them out to be” (Student 303). Such important realizations by the students point to simulations serving an important role in connecting the facts and theory presented in the text with real-world situations in ways that traditional instruction may not be able to accomplish.

Two survey questions focused specifically on the simulation as a tool to help students learn analytical skills. Each of these questions had a mean of approximately 4.2, indicating that, on average, students agreed that the simulation helped them to think through policy issues and to confront the trade-offs between different perspectives. Student 430 wrote that, as a result of her participation in the simulation, she takes “most issues more seriously now and [tries] to analyze the pros, cons, and overall outcomes of all options.” The simulation helped another find “respect for the government because they deal with so many issues that are often overlooked or taken for granted” (Student 118).

Here again, the simulation appears to have some unique advantages. The passive nature of student learning in a lecture setting may set the stage for a situation in which the professor dispenses his or her knowledge to the students and the students passively and uncritically accept that information as unconnected facts. Certainly students could, and should, become discerning participants in their own education. However, some students either chose not to or do not know how to do this. A simulation forces the students to draw conclusions and compare different viewpoints. Additionally, those who are debating the issues and presenting information are peers, not the professor. This format may make students more willing to think critically about what is being
<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Learning Category</th>
<th>Frequency and Percentage of Response</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The simulation gave me an opportunity to apply what I had learned in class.</td>
<td>Application(^1)</td>
<td>Strongly Agree 43.0% Agree 45.6% Neutral 8.8% Disagree 2.6% Strongly Disagree 0.0%</td>
<td>4.29</td>
<td>0.74</td>
</tr>
<tr>
<td>The simulation forced me to confront the trade-offs between different policy perspectives.</td>
<td>Analysis(^1)</td>
<td>Strongly Agree 66% Agree 99% Neutral 24% Disagree 3% Strongly Disagree 1%</td>
<td>4.17</td>
<td>0.74</td>
</tr>
<tr>
<td>The simulation helped me to think through the policy issues facing cities.</td>
<td>Analysis(^1)</td>
<td>Strongly Agree 34.7% Agree 52.9% Neutral 11.9% Disagree 0.5% Strongly Disagree 0.0%</td>
<td>4.22</td>
<td>0.66</td>
</tr>
<tr>
<td>I was able to draw on different topics discussed during the semester to develop arguments during the simulation.</td>
<td>Synthesis(^1)</td>
<td>Strongly Agree 22.3% Agree 59.1% Neutral 15.5% Disagree 3.1% Strongly Disagree 0.0%</td>
<td>4.00</td>
<td>0.71</td>
</tr>
<tr>
<td>I was able to develop an argument for my position on the issues in the simulation.</td>
<td>Synthesis(^1)</td>
<td>Strongly Agree 42.5% Agree 49.2% Neutral 7.8% Disagree 0.5% Strongly Disagree 0.0%</td>
<td>4.34</td>
<td>0.64</td>
</tr>
<tr>
<td>The simulation gave me the opportunity to make judgments about different policy solutions.</td>
<td>Evaluation(^1)</td>
<td>Strongly Agree 88% Agree 89% Neutral 15% Disagree 1% Strongly Disagree 0%</td>
<td>4.37</td>
<td>0.65</td>
</tr>
<tr>
<td>The simulation helped me learn about myself and my opinions on issues.</td>
<td>Human Dimension(^2)</td>
<td>Strongly Agree 34.2% Agree 90% Neutral 30% Disagree 7% Strongly Disagree 0%</td>
<td>4.11</td>
<td>0.80</td>
</tr>
<tr>
<td>I feel the simulation helped me to become sensitive to the perspectives of others.</td>
<td>Human Dimension(^2)</td>
<td>Strongly Agree 61% Agree 85% Neutral 41% Disagree 6% Strongly Disagree 0%</td>
<td>4.04</td>
<td>0.81</td>
</tr>
<tr>
<td>The simulation helped me become excited about the issues debated and discussed.</td>
<td>Caring(^2)</td>
<td>Strongly Agree 53% Agree 87% Neutral 42% Disagree 10% Strongly Disagree 1%</td>
<td>3.94</td>
<td>0.86</td>
</tr>
<tr>
<td>I think I will be a more engaged citizen after having participated in the simulation.</td>
<td>Caring(^2)</td>
<td>Strongly Agree 50% Agree 80% Neutral 48% Disagree 14% Strongly Disagree 1%</td>
<td>3.85</td>
<td>0.91</td>
</tr>
<tr>
<td>The simulation made me want to learn more about the urban issues in the future.</td>
<td>Learning How to Learn(^2)</td>
<td>Strongly Agree 30.1% Agree 45.6% Neutral 20.2% Disagree 3.6% Strongly Disagree 0.5%</td>
<td>4.01</td>
<td>0.84</td>
</tr>
</tbody>
</table>

said. Certainly some students need a little help in doing so, which is why each policy issue brought before the city council in the simulation was followed by a short discussion. But the simulation appears to be an excellent forum to use in helping students to develop their analytical skills.

The two questions regarding the perception of the simulation as an opportunity for the students to develop an argument correspond to the synthesis category in Bloom’s (1956) taxonomy. Here again, most students agreed or strongly agreed (81.4%) that the simulation gave them the opportunity to draw on different topics discussed during the semester to develop an argument (mean = 4.00). Likewise, 91.7% of the respondents strongly agreed or agreed that, through the simulation, they were able to develop an argument for their position on the issues discussed during the simulation (mean = 4.34). Comments that speak to the perceived impact of the simulation on argument development include the following: “I feel more confident that if I were to go to a city council for something I could make a strong argument” (Student 411); the most important thing I learned was “how to express myself respectfully” (Student 428); and “[the simulation] taught me how to view the info critically and create a worthwhile [counterargument]” (Student 338). Although not impossible to do using traditional teaching techniques, assisting students in learning these valuable lessons is likely harder in the absence of active learning exercises. While papers and class discussion may prove effective, the simulation has the advantage of alleviating student timidity. Since roles are assigned, the timid student may feel more comfortable sharing his or her thoughts and arguments because they are just “playing a role” and not having to take personal ownership of what they say. Nearly 82% of students agreed or strongly agreed that they felt comfortable participating in the simulation, and only 8 students (4.2%) disagreed. Further, while position papers are common both within the classroom and in the real world, the interactive nature of the simulation forces students to come up with their arguments on the spot. Such experiences and skills are important since both students and graduates alike will often find themselves having to take and defend a position without having the opportunity to compose their thoughts on paper first.

The one evaluation-related question on the survey asked if the students thought that the simulation gave them the opportunity to make judgments about different policy alternatives. This question received the most favorable responses; nearly 94% of those playing city council/planning commission members and roughly 93% of those playing citizen roles agreed or strongly agreed with this statement (mean = 4.37). This result is significant because evaluation is the highest level of learning according to Bloom’s (1956) taxonomy. Evaluation also seemed to be the most challenging learning experience for the students. One student, whose role was that of a city council member, commented that “I really understood everyone’s point of view I just had a
difficult time deciding who to upset as a council member” (Student 236). Another student wrote, “Governments have so much responsibility! The in-depth thought and consideration they must put into things is crazy. I just kind of have a better understanding of how governments do things” (Student 307).

Comments regarding a newfound respect for the complexities of the issues and the diversity of the proposed solutions that are inherent in public policy were a common theme across a number of student responses. For example, one student reported that the most important thing he or she learned from the simulation was “the ways in which issues can seem so cut and dry on paper but when in reality they are multi-faceted and complicated” (Student 314). Similarly, another remarked that “I think we learned how complicated even the simplest issue can be. Every issue is kind of interrelated and I honestly never realized that before we did this simulation” (Student 307).

Perhaps the sequential treatment of topics in textbook chapters and lecture sessions obscures the complexity inherent in the real world (Anderson & Lawton, 2009; Huba & Freed, 2000). While the interrelatedness of the topics may seem obvious to the instructor because of his or her experience, the students may fail to make the proper connections. For example, while economic development and municipal planning may be addressed in consecutive class sessions, the connections between these two book chapters may not be fully realized by students who lack a context within which to bridge these two topics. This likely is a nonissue in a simulation, since the scenarios encountered draw upon realistic situations that are not compartmentalized by artificial chapter delineations (Anderson & Lawton, 2009).

The simulation also proved to give students the opportunity to learn about themselves and others. This type of learning is what Fink (2003) referred to as the human dimension. Roughly 80% of respondents reported that the simulation helped them learn more about themselves and their opinions about different public policies (mean = 4.11). For example, one student exclaimed that “I’m less liberal than I thought” (Student 332). Apparently, this individual’s self-awareness was increased as she realized that what she thought was her ideological leaning was in fact not accurate once she was confronted with the issues discussed throughout the simulation. Similarly, Student 137 commented that “the simulations expanded my horizons” and Student 110 stated that “I think I look at all sides very well but people brought up things I never even thought about.”

Not only did the simulation increase the student’s self-awareness, but they also learned to become sensitive to the perspectives of others (mean = 4.04). Some of the learning regarding the appreciation of the viewpoint of others was the result of students playing roles that were unlike themselves. One such student noted that the simulation “showed me how others might feel on the subject and made me put on someone else’s shoes” (Student 243). Another student thought...
that the simulation was effective in allowing him or her to see the point of view of others “because the book forced us to take on rolls [sic] that college kids do not think of as being people in a community” (Student 444). Still others just appreciated the opportunity to hear opposing sides have a civil debate. “Hearing other people’s points of view allowed me to consider all the individuals in a community” (Student 244). Thus, the act of playing a role may provide a vehicle for personal growth and increased awareness of others that traditional teaching techniques have a difficult time replicating. While students may write a paper from an opposing point of view, that is likely not as effective as playing a role with differing views and/or interacting with roles with differing views. Perhaps playing such a role repeatedly makes the opposing view more real.

Learning to care is another type of learning well suited for the simulation. The two survey questions corresponding to this type of learning had the lowest scores (mean = 3.85 and 3.94). However, a number of students provided comments that seem to indicate that, while the classes on a whole somewhat less than agreed that the simulation made them excited about public policy or made them want to become more engaged citizens, others were inspired by the simulation. A few commented that the simulation had made them more interested in government and/or urban policy. For others it “confirmed their career choice to be a city manager” because, as one student put it, the simulation showed him “at least a glimpse of what [they are] getting into” (Student 108) and showed another that “a career in government can be very interesting” (Student 455).

For others, it helped them develop a stronger understanding of civic engagement. One student offered that the simulation “helped me realize that if I ever do have a problem with something that is trying to be passed I can go and put in my two cents” (Student 243); another student said that the most important thing he learned was to “make sure to voice your opinion” (Student 446). While simulations seem to be only moderately effective in helping the students learn to care, it should be noted that even a modest impact in this area may be worth the effort. Part of the purpose of this course is to get students interested in public affairs, and it did so for some of the students.

Similarly, the simulation also had a significant impact on helping the students learn to want to learn more. Over 75% of the students agreed or strongly agreed that the simulation made them want to learn more about urban issues (mean = 4.01). Again, this finding speaks to the desire to encourage the students to become interested in public affairs.

Although the data demonstrates that students largely see the value of the simulations as an opportunity to engage in higher-level learning, not all students shared this perspective. Of the 193 students who completed all of the questions related to higher-level learning, 34 (17.6%) disagreed or strongly disagreed with at least one of the higher-level learning questions. While there does not appear
to be a statistically significant correlation between perceptions of higher-level learning and student characteristics, experiences, and roles, some of the student comments deserve attention for the future implementation of simulations in the public affairs classroom. One of the more common negative complaints from students had to do with their role assignments (6 out of 193; 3.1%). At least one student commented that it did not “seem like council members were chosen in a fair way” (Student 152). When assigning the roles, the instructors solicited input from the students regarding their preferred role. Since, generally speaking, very few students voluntarily submitted their preferences, most roles either were assigned based on the instructor’s assessment of the students’ interests, characteristics, strengths, and weaknesses or were assigned randomly. Another role-related issue that was identified is the notion that city council/planning commission members had a different experience from those students who played citizen roles. When asked if the experience changed how she viewed government, one student commented that her view did not really change because she “wasn’t a member of the council [but] maybe if [she] was [a council member] it would change [her] perspective” (Student 232). Further, while some appreciated that they were “forced to think in terms of [their] character” (Student 121) because they felt it helped them to see the point of view of others, some students felt that they were unable to relate to and therefore act or think like their role. For example, one student commented that “from a college student standpoint it was hard to act like a 50 year old businessman or a woman with four kids” (Student 403).

It is clear that role assignments are very important and that student input into and perceptions of the assignment process are important. Perhaps requiring students to submit a list of their top three or five roles would facilitate this. While all students may not be assigned to their first choice, they most likely would at least be assigned one of the roles they self-identified as being of interest to them. “Self selection of roles means that students are more likely to receive a role they will enjoy (and work hard at)” (Caruson, 2005, p. 307). That being said, a simulation often includes roles that require a specific type of student (Caruson, 2005). In the Camelot simulation, for example, there is a role of the topless bar owner. This role requires that the assigned student be mature and play the role in a responsible and appropriate manner. In this case, I would hand-pick a particular student to play this role and talk to him or her about why I chose them for the role and to see if they had any concerns about playing this part. So, while this role would not necessarily be self-selected, my approach gave the students a chance to buy into the idea of the role.

Another important consideration that should be made when assigning roles is the issue of ethnicity and race. Of the 76 roles detailed in the simulation, only four imply or specify a race or ethnicity: Camelot City Councilor Number 5, the African Methodist Episcopal Minister, the Head of the local NAACP chapter,
and the Chairperson of the Camelot Hispanic Coalition. Thought was taken when assigning these roles, which could be handled in one of three ways. They could be assigned to students who were members of the identified or implied racial/ethnic group, they could be assigned to nonminority students, or they could be left unassigned, depending on the circumstances of the simulation. Since none of the course sections could cover all of the 23 issues included in the Camelot text (Woodworth et al., 2005) in the time allotted, the decision regarding which issues to cover largely dictated the roles that were assigned. When these roles were assigned based on the instructor’s decision and not as the result of the student’s request, I would often talk to the student to explain the decision and answer any questions regarding how the part should be played. Such a conversation is critical (Brookfield, 1990). When a minority student was assigned to play one of the minority roles, I would talk with the student about his or her role and explain that I think it is a powerful learning opportunity for the mostly nonminority class to see things from potentially different perspectives. Other times, a minority role was assigned to a nonminority student. In these situations it was important to choose a student who would play this role appropriately and effectively. Also, this could serve as a learning opportunity for a nonminority student to experience some of the debates as a minority representative. This experience could be particularly useful for those going into public service, where they will serve all of the citizens of the community and not just those who are like themselves. Also, there are circumstances where role descriptions were modified. For example, I asked a Jewish student to play the role of the minister. In talking with him, he and I decided to rename the role to be a rabbi. This made him more comfortable playing the role, but it did not affect the substance of the simulation because the perspectives of this role are general to the clergy and are nondenominational in nature.

While the combination of hand-selecting particular roles and allowing self-selection to dictate the others may help avoid the issues of role assignments mentioned here, some students may still be unhappy. It is important in these cases that instructors solicit feedback from students regarding their assignment to address concerns or make changes to help ensure that students get the most out of the simulation experience. Some (6 out 193; 3.1%) felt that how certain students chose to play their role was a barrier to learning, particularly in terms of developing a better understanding of others. One student commented that “we didn't see the real point of view because we were actually responding from our role” (Student 413). This response may hearken back to Student 403’s comment about her inability to relate to her role. This is certainly an issue with the type of simulation discussed in this paper. There is a trade-off when students are asked to play roles that are substantially different from themselves. While they may be given the opportunity to look at things from a perspective that is different from their own,
a realistic and/or impassioned interpretation of this different point of view may suffer because it is so foreign. Student opinions on this issue varied; comments ranged from “it sucked [that] you can’t express [your] own opinion but what was given to you” (Student 224) to “some people should stick to their roles” (Student 454).

Here again, it should be pointed out that role assignment is crucial. While the self-selection process of assigning student roles described earlier may help with the realism and passion with which students play their roles, it may negate the opportunity for the students to learn to see and experience things from a different perspective. Also, as discussed earlier, the simulation role descriptions gave students a great deal of discretion regarding how to proceed during debates for which their role’s position was not clearly defined. Instructors, therefore, should take time to make it clear to students how closely they must play their roles and offer guidance regarding how to think about what position their role would take when that is not explicitly stated. This approach could help avoid comments like the one made by Student 454.

The last critical theme identified in a few (4 out 193; 2.1%) student comments was related to the realism of the simulation. Some felt that the simulation was not realistic enough. Comments like these are difficult in that one of the ideas behind the simulation is to give them an authentic experience. However, being too realistic may actually confound the learning process. For example, an actual city council would rely on Robert’s Rules of Order to set procedure. However, conforming to such formality may obfuscate the intent of the simulation. A simulation, by definition, must be a simplification of the real world. As such, thought must be taken when deciding which aspects of the real-world event to simplify because they are not essential to the learning objectives of the simulation and which aspects of the real-world event are pivotal and therefore must be accurately depicted in the classroom.

CONCLUSION

One strength of using role-playing simulations in the public affairs classroom is that they give students an opportunity to tackle ill-defined problems, for which there is no “correct” answer, in a realistic setting.

Solving ill-defined problems requires judgment, planning, the use of strategies, and the implementation of previously learned skill repertoires. Addressing ill-defined problems helps develop inquiry skills as students become researchers, seeking out and evaluating new information in their discipline, integrating it with what is known, organizing it for presentation, and having the opportunity to talk about it with others. (Huba & Freed, 2000, p. 203)
While promising, simulations should not be seen as a panacea. As discussed earlier, there are a number of real and perceived barriers to the incorporation of simulations in public affairs courses, including the amount of preparation time required, the difficulty in covering the course material due to the time spent on the simulation, and the concerns over whether the simulation provides the desired learning experience. However, with the proper preparation and approach, these barriers can be overcome and simulations can be structured to enhance student learning.

In my experience, the time taken to prepare for the simulation session is the same or less than the time taken to prepare for a regular class session. My course preparation came in three forms. First, I purposely referred to the simulation throughout the semester as a way to prepare students for it. On the first day of class, I told the students that a multisession simulation would be held at the end of the semester and, perhaps most important, I gave them the rationale for its incorporation in the course. Then, throughout the semester, I mentioned some of the simulated issues while we discussed various course topics and issues. I do so to help maintain students’ awareness of the simulation as well as help them see that they would likely need to refer to the course material and concepts during the simulation. Second, I started considering different students for certain roles from the first day of class. As mentioned previously, some roles needed to be played by a certain type of student. Third, I chose the issues that would come before the city council. This decision was based on the roles I assigned and the topics that I wanted to cover in the simulation. Finally, on the class session before the start of the simulation, I devoted the entire 1-hour, 15-minute period to discussing the simulation, reiterating why we were doing it, explaining how the simulation would run, explaining the purpose of the reaction papers, and answering any questions that students had. After discussing the simulation with the entire class, I met separately with the city council and the students playing the central roles related to the issues that would be introduced during the first day of the simulation. We went over the specifics related to their roles and the procedures they should follow during the simulation.

My intent was to use the simulation to achieve the higher-level learning objectives discussed in this paper. However, role-playing simulations can be used to achieve other learning objectives as well. Ultimately, the key for the instructor is to identify the learning objectives he or she has for the students and consider which pedagogical techniques will best achieve them. This link between the objective and the technique must be intentional and explicit, for active learning techniques are a means to an end, the end being the learning experience that the instructor wants for the students.

In my course, I used a number of different active learning techniques to achieve particular objectives throughout the semester. However, as the capstone experience in my class, I chose to do the role-playing simulation. Unlike
discussion or writing-based active learning techniques, role-playing simulations have the advantage of helping students “experience” the course material in a reasonably realistic situation. This aspect was important to me. While some of my students were planning to go into the public sector professionally, all of my students will live in a city or town. I wanted them to see that public issues were relevant and had meaningful impacts on people’s lives. Also, I wanted them to experience the democratic process and see that they could participate in it. While the students were required to attend a real city council meeting, I feel like the simulated meetings in our class had a more personal impact on their understanding. This was evidenced by the fact that while the papers written by students after attending the real meeting were impersonal and factual, the reaction papers written after the simulation session often were impassioned.

I also preferred the multisession role-playing simulation over other active learning techniques because of its iterative and interactive aspects. Although simulations are somewhat rare in the public affairs classroom, case studies are not. While case studies are often based on real situations and can be designed so that the end product is authentic (i.e., the students are asked to analyze the case as if they were the city manager), this method, I believe, would not have been as successful at meeting some of my learning objectives for the experience. I wanted the students to be able to engage in the debate aspects of the simulation, to learn to react to the comments of others on their feet, to take on the role of someone different from themselves, and to construct their arguments based on past decisions and comments.

The findings in this paper present a compelling case for the inclusion of role-playing simulations in the public affairs classroom. However, a natural question arising from this paper is how role-playing simulations such as the one described in this paper compare to other active learning techniques, such as case studies, computerized simulations, service learning, or any other of the myriad of active learning techniques available. Different pedagogical approaches likely will result in different types of student learning (Krain & Lantis, 2006). Another issue worthy of future research is the impact that various pedagogical techniques have on the long-term retention of different aspects of high-level learning. More guidance is needed regarding the comparative effectiveness of these techniques on higher-level learning so that instructors can make research-based decisions regarding the benefits and costs associated with each and to help inform their decision regarding which technique to use in a given circumstance to address a particular learning objective.

While similar simulations in similar courses likely would result in similar outcomes, simulations may not be well suited for all classes. In circumstances where the learning objectives are predominantly knowledge and comprehension, the simulation may not be worthwhile since its primary impact is on the students’ higher-level learning. Likewise, it may not be as useful in less applied/
practical settings. Even those graduates who chose not to go into the public sector will at least become a citizen of a town, city, state, and so forth. Therefore the real-world applicability is explicit. It may be difficult to get students to play their roles under circumstances where the courses are more theoretical or specialized since the students may have more difficulty in seeing themselves using the lessons they learn. Also, the instructor may have an impact on the success of the simulation. Teaching experience, teaching style, familiarity with the course material, and ability to guide the students effectively through the simulation session and through the debriefing discussion will all impact the student’s ability to engage in higher-level learning.

In summary, it appears that this simulation allowed the students to apply concepts that were learned throughout the semester in ways that the traditional lecture, exam, or paper could not accomplish. Students commented that the simulation was “very effective. I learned much more here than on any test” (Student 101); “it helps to complete the understanding of concepts by having the chance of simulating what actually happens in a council meeting. You are challenged to think creatively and critically” (Student 413); and “I learned more from this simulation than I did from watching a city council meeting and writing a paper about it” (Student 244). Further, it helped inspire some to gain an appreciation of the perspective of others while also learning more about themselves. To this end, Student 103 commented that “there were very good points from others that help expand my mind,” and Student 304 stated that “because people come from different backgrounds there are always perspectives that I have never considered due to my background. I like to hear these perspectives as it enhances my way of thinking.”

The simulation should not be seen as a replacement for more traditional methods of instruction. Without these more conventional teaching strategies, the simulation would not work. However, at least as practiced in this course, the traditional techniques are used to establish the lower-level learning. As the literature suggests, simulations are likely inefficient for “teaching terminology, factual knowledge, basic concepts or principles…[since] the basics of a course can be covered more quickly in lectures” (Anderson & Lawton, 2009, p. 195). However, once this foundation has been set, this study shows that simulations can give students a realistic environment in which to experience higher-level learning.

**FOOTNOTE**
All four course sections require at least one position paper during the semester.
REFERENCES


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ICT-Pedagogy Integration in Teacher Training: Application Cases Worldwide

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ABSTRACT
Teaching is becoming one of the most challenging professions in our society where knowledge is expanding rapidly and modern technologies are demanding teachers to learn how to use these technologies in their teaching. While new technologies increase teachers’ training needs, they also offer part of the solution. Information and communication technology (ICT) can provide more flexible and effective ways for professional development for teachers, improve pre- and in-service teacher training, and connect teachers to the global teacher community. This paper analyses and organizes a variety of approaches found in ICT uses in teacher training into a four-cell matrix. Based on the analysis of those approaches, it discusses new possibilities and challenges that ICT has brought to teacher training and professional development. It concludes with discussion of emerging research issues with respect to ICT integration into teacher training and networking.

Keywords
ICT teacher training, ICT use, online training, teacher training, training approaches

Introduction
While information and communication technology (ICT) is not a panacea for all educational problems, today’s technologies are essential tools for teaching and learning. To use these tools effectively and efficiently, teachers need visions of the technologies’ potential, opportunities to apply them, training and just-in-time support, and time to experiment. Only then can teachers be informed and confident in their use of new technologies (Bowes, 2003).

Teaching is becoming one of the most challenging professions in our society where knowledge is expanding rapidly and much of it is available to students as well as teachers at the same time (Perraton, Robinson, & Creed, 2001). As new concepts of learning have evolved, teachers are expected to facilitate learning and make it meaningful to individual learners rather than just to provide knowledge and skills. Modern developments of innovative technologies have provided new possibilities to teaching professions, but at the same time have placed more demands on teachers to learn how to use these new technologies in their teaching (Robinson & Latchem, 2003). These challenges ask teachers to continuously retrain themselves and acquire new knowledge and skills while maintaining their jobs (Carlson & Gadio, 2002). Then what can be done to help teachers meet these challenges?

Today, a variety of ICT can facilitate not only delivery of instruction, but also learning process itself. Moreover, ICT can promote international collaboration and networking in education and professional development. There’s a range of ICT options – from videoconferencing through multimedia delivery to web sites - which can be used to meet the challenges teachers face today. In fact, there has been increasing evidence that ICT may be able to provide more flexible and effective ways for lifelong professional development for today’s teachers.

Because of rapid development in ICT, especially the Internet, traditional initial teacher training as well as in-service continued training institutions worldwide are undergoing a rapid change in the structure and content of their training and delivery methods of their courses. However, combining new technologies with effective pedagogy has become a daunting task for both initial teacher training and in-service training institutions.

This paper looks at a variety of approaches in ICT-Pedagogy integration in teacher training. Those approaches are organized into a four-cell matrix and elaborated with the collection of cases in an international context. Via a variety of examples, the author tries to show that ICT use is not only a matter of new possibilities but that it also brings with it new implications and new challenges. The paper concludes with a discussion of emerging research...
issues involved in ICT applications in teacher training. Methods employed in this study include desk analyses of various ICT teacher training cases and approaches published in selected articles or websites and face-to-face or email interviews with experts for verification.

Teacher Training Approaches

Research indicates that ICT can change the way teachers teach and that it is especially useful in supporting more student-centered approaches to instruction and in developing the higher order skills and promoting collaborative activities (Haddad, 2003). Recognizing the importance of ICT in teaching and learning, a majority of the countries in the world have provided ICT teacher training in a variety of forms and degrees. Even though many teachers report that they have not had adequate training to prepare themselves to use technology effectively in teaching and learning, there seem to be several efforts around the world in which countries are effectively using technology to train teachers, and/or are training teachers to use technology as tools for enhancing teaching and learning.

ICT teacher training can take many forms. Teachers can be trained to learn HOW to use ICT or teachers can be trained VIA ICT. ICT can be used as a core or a complementary means to the teacher training process (Collis & Jung, 2003). This paper organizes various ICT teacher training efforts found in different countries into four categories using the framework of Figure 1.

![Figure 1. Categories for ICT in teacher training (adapted from Collis & Jung, 2003, p.176)](image)

**Figure 1.** Categories for ICT in teacher training (adapted from Collis & Jung, 2003, p.176)

**ICT use as main content focus of teacher training**

Most of the early ICT teacher training programs in the 1990’s focused on ICT use as the main training content. This approach has an emphasis on teacher training in how to use ICT in the classroom. It addresses issues such as selecting appropriate ICT tools and supporting students in the use of those tools, using ICT to promote learning activities, developing new methods of facilitating learning and evaluating student performance, and so on. One example case from Singapore’s initial teacher training is provided below.
As Singapore’s only pre-service teacher training institute, the National Institute of Education (NIE) was entrusted with the responsibility for integrating ICT into initial teacher training programs based on the nation’s Masterplan for IT in Education. Accordingly, the NIE developed and began implementing a new ICT plan in 1998, which identified four main areas that needed change: curriculum; physical and technological infrastructure; human resource infrastructure; and R & D in the use of ICT in education. For the purpose of this chapter, I will focus on how NIE has revised its curriculum to promote ICT use in the classroom for future teachers (Jung, 2001).

The curriculum was revised to include three kinds of ICT courses for student teachers: basic ICT-skill workshops, a 30-hour ICT foundation course, and a 26-hour elective course. In addition, the 6 to 12 hours of ICT integration into each curricular subject class was recommended. Basic ICT skill workshops, paid for by students, are provided by external organizations and cover word processing, PowerPoint, Internet literacy, and other technical skills. A 26-hour elective course covers the design and production of computer-based instruction. A 30-hour ICT foundation course is entitled “Instructional Technology” and covers: “learning, thinking and the effective use of instructional technologies in the classroom; instructional planning models; selecting, creating, evaluating, and integrating instructional technologies and resource materials; promoting creativity and complex thinking through ICT project work activities; and organizing and managing instructional activities with appropriate ICT resources in the classroom.” Besides taking these courses, NIE students pursuing a Diploma in Education must have five weeks of practicum during the first year of their pre-service training and ten weeks during the second year. The trainee is expected to use ICT while teaching, depending on the school’s ICT infrastructure.

As shown in the NIE’s case, this approach of using ICT as the main content focus of teacher training emphasizes the development of basic ICT skills, design and development skills, and pedagogical strategies. However, the basic ICT skill development, rather than the ICT-pedagogical integration, has been the major concern of teacher training. When interviewed about the new teacher training curriculum, student teachers at NIE agreed that the foundation course provided useful pedagogical strategies for the use of ICT in classroom teaching. However, they also reported that the 30 hours of instruction was not enough time to gain proficiency in ICT-pedagogy integration, and some wanted more ICT-pedagogy integration in the practicum. The next approach provides a more effective way of ICT-pedagogy integration in teacher training programs.

**ICT use as part of teaching methods**

This approach integrates ICT into teacher training to facilitate some aspects of training. Two cases below show how a variety of ICT are adopted as part of effective training methods. In these cases, teachers are provided with examples of ICT-pedagogy integration in their training process.

Captured Wisdom (http://www.ncrel.org/cw/) is a resource developed by the federally-funded (USA) North Central Technology in Education Consortium for K-12 teachers, school administrators and extended to adult literacy educators. It uses videotape and CD-ROM to help US teachers to see how technology can be integrated into their work. The Captured Wisdom (tm) CD-ROM Library is made up of stories about teachers who are making meaningful and creative uses of technology in their instruction. These CD-ROMs contain video descriptions and demonstrations of how technology is used in teachers’ classrooms. They provide “examples of real educators and learners using successful practices of technology to support instruction and learning in their classrooms.” Video sequences are viewed by teachers’ focus groups who then discuss the strategies and techniques of classroom management, assessment, etc. In this specific case, teachers learn how to use ICT in their classrooms by actually being engaged in the process of ICT-integrated training.

Another example of this approach can be found in the School Administrators’ Technology Integration Resource (http://www.satir-ritas.org) project. It is a bilingual Canadian initiative which provides tools and resources to help school administrators successfully integrate ICT into curriculum in their school. It includes the National Center for Technology Planning clearinghouse of school district ICT plans, advice on how to provide technology, successful practices in introducing ICT, perspectives on staff development, a beginners’ guide to the Internet, etc. The focus of this project is not on the basic skill development but on the development of ICT-pedagogy integration skills of educators by sharing successful cases and practical ideas.

UNICEF’s Teachers Talking About Learning (http://www.unicef.org/teachers/) also illustrates the application of this approach to ICT teacher training. It is designed for international collaboration between teachers in
developing countries using the Internet and television. It provides access to teacher training materials and useful links and promotes discussions among teachers.

All the cases discussed above use ICT as part of training methods and promote teachers’ ICT-pedagogy integration in the classroom by demonstrating examples and allowing discussions among teachers throughout the whole training process. Participants of the training are asked to actually use ICT to learn about ICT skills and develop ICT-integrated pedagogies. These training strategies seem to be supported by previous research that argues that teachers are likely to benefit by actively experiencing ICT skills as a learner (Jung, 2003).

**ICT as core technology for delivering teacher training**

In this approach, ICT is used as the major way of providing the learning experience of teacher training. The content of this approach does not necessarily focus on ICT skill itself but rather covers a variety of ICT applications. As you will see in the two examples below, the digital technology is frequently becoming the core technology of ICT teacher training.

The case of the Virtual High School (VHS: http://www.govhs.org/website.nsf) in the USA provides an example of the Internet-based ICT teacher training. VHS is a non-profit organization that facilitates a collaborative of participating secondary schools; for every semester a participating school offers a VHS NetCourse that school can enroll up to 20 students in VHS courses. A limited number of student-only schools are allowed to enroll students (10 per semester) on a trial basis, for a single year, after which they must train a teacher and join VHS as a fully participating school. The VHS has developed two graduate-level online professional development courses for teachers of participating high schools: a 26-week Teachers Learning Conference (TLC) course which trains teachers to develop and teach a NetCourse for VHS and a 15-week Netcourse Instructional Methodologies (NIM) which trains teachers to teach an existing online VHS course.

The TLC is designed to train teachers to become online course instructors and course developers whereas the NIM is designed to prepare classroom teachers to become online course instructors only. The TLC provides instruction on the pedagogy and methodology that each teacher will need to develop an effective NetCourse to be offered to the VHS students. A facilitator, a veteran VHS teacher, is assigned to each TLC participant to ensure that they have the correct resources to achieve training objectives. The focus the NIM is on content and curriculum, as well as good online course delivery. Experienced facilitators are assigned to help NIM participants access the correct resources and monitor each participant's progress.

Both of the teacher training courses at VHS use the Internet as the main delivery technology and focus on ICT-pedagogy integration in an online learning environment. Support given by facilitators of these courses is known as an important factor which helps teachers have positive experiences with technology and integrate technology into their own teaching (Freeman, 1997).

Another case of adopting ICT as the core delivery means of teacher training can be found in the LearnLink project (http://www.aed.org/learnlink) supported by USAID and AED. The project has implemented computer-mediated professional development programs to improve training and support services for teachers in several developing countries (Fontaine, 2000; Collis & Jung, 2003). For example, in Guatemala, the project includes the development of culturally appropriate Mayan language instructional materials, and improvement of teacher’s professional skills in Mayan languages. Necessary equipment and multimedia computer labs have been installed in several teacher training schools in the Quiche region and instructional materials for bilingual teacher preparation, including an interactive multimedia system on CD-ROM to train teachers in oral and written languages have been developed. In Morocco and Namibia, the Computer Assisted Teacher Training project has started to develop computer-assisted teacher training courses and construct communications network to facilitate interaction among teacher trainees, teacher trainers, and inspectors. Moreover, collaboration and information sharing among peers across the provinces have been emphasized. Similarly, the Connectivity for Educator Development project in Uganda has been designed to improve professional development for primary school teachers, with a focus on multimedia-assisted teacher training and digital library resources. The US-Brazil Learning Technologies Network is an Internet-based learning environment and clearinghouse on the role of ICT in education and promoting interactive collaboration between teachers in the two countries.

The LearnLink project is still under implementation. Some of the expected outcomes include: increased collaboration and interactions among educators in each country or among countries, institutionalization of
support for learning technology in each country, greater ICT access for teachers and students, ICT-based curriculum reform, and enhancement of pedagogy.

An Internet-based online teacher training is recently introduced and has been found to provide a flexible and interactive training environment for teachers (Jung, 2003). However, costs related to the online training cannot be ignored in most parts of the world and effective online training pedagogies for ICT teacher training have yet to be explored.

**ICT used to facilitate professional development and networking**

Whereas the use of ICT as core technology for delivering teacher training can be found in limited contexts, there are many examples of ICT, particularly Internet and Web-based communication technologies, being used to support teachers’ on-going professional development and networking. Many countries have developed a website or websites to provide online resources for teachers and facilitate teachers’ networking based on the assumption that professional development should be an integral part of daily practice for all teachers and the use of the Internet would enhance continuous professional development activities of teachers, connecting teachers to larger teaching communities and allowing for interaction with expert groups. Specific examples are discussed below.

The UK Virtual Teacher Centre (http://vtc.ngfl.gov.uk) website provides a "Career Development" area which provides a variety of learning and teaching resources and links to support teachers’ continuing professional development. Under "Support Providers", for example, teachers can find a range of resources for professional development, such as the ICT Support Network Directory which provides easy access to ICT provision and training. Teachers also find a link to the New Opportunities Fund (NOF), which is currently providing ICT training for teachers and librarians. “International Professional Development” helps teachers learn from and contribute to educational ideas and best practice throughout the world. TeacherNet UK (http://www.teachernetuk.org.uk), an independent professional association for teachers, also supports teachers’ professional development and national and international teacher networking.

The Korea’s EduNet (http://www.edunet4u.net/) is an integrated educational internet services for K-12 students and teachers managed by the Korea Education and Research Information Services. Through the EduNet, teachers can search the materials according to training institution, content, instructor, year of publication and type of training, and download them for self-training. These online materials can be also used for individual study in conjunction with face-to-face courses, or as learning resources for online teacher training courses offered by educational institutions.

Similar to the cases above, the US Teachers Network (http://www.teachnet.org), a nationwide, educational non-profit organization, identifies and connects innovative teachers exemplifying professionalism and creativity within public school systems. This network promotes interactive collaboration among teachers and educators to improve teaching and student achievement, provides resources for designing their own professional development, disseminates the work of outstanding classroom teachers, and attempts to provide teachers with the knowledge and skills needed for good teachers. At the international level, the World Bank’s World Links for Development (WorLD) (http://www.worldbank.org/worldlinks/english/index.html) program provides Internet connectivity and training for teachers, teacher trainers and students in developing countries in the use of ICT and other technologies in education. WorLD then links students and teachers in secondary schools in developing countries with schools in industrialized countries for collaborative learning via the Internet.

Other examples include: SchoolNet SA (http://www.school.za), a South African organization providing supports to educators and learners who wish to use ICT in education; Singapore’ Clearinghouse (http://www1.moe.edu.sg/iteducation/resources/welcome.htm), a website created by Ministry of Education to provide ICT resources and internet educational resources including lesson plans for various content areas for teachers; Swedish Schoolnet (http://www.skolutveckling.se/skolnet/english/index.html), a website to stimulate the use of ICT in schools; and European Schoolnet (http://www.eun.org/eun.org2/eun/en/index.html), the European framework for the co-operation between the European Ministries of Education on ICT use in education.

One of the best ways to develop teachers’ ICT skills and promote ICT-pedagogy integration in their teaching is the provision of ICT-based training environments where on-demand access to materials, peers, and networks of experts where expertise and advices can be obtained and active discussion can take place in relation to
technology or pedagogy. In this regard, the approach of using ICT to support teachers’ on-going professional development and networking can be very effective as long as organized support is provided (Pacey, 1999).

**Discussions and Conclusions**

This analysis of approaches in ICT teacher training indicates that there are possibilities and challenges in adopting ICT in teacher training and professional development. Some possibilities are discussed below.

Overall, governments and teacher training institutions seem to recognize the importance of integrating ICT in education and teacher training. In many cases, the national vision for ICT use in education has been integrated into teacher training. For example, Singapore’s teacher training institute has successfully integrated the national vision toward ICT use in education into its ICT plan. Other countries such as UK, USA, South Africa, Sweden and Korea have developed extensive online resources and encouraged active exchanges of new pedagogical ideas to upgrade teachers’ knowledge and skills at the national or international level. In addition, the LearnLink project in several developing countries is being implemented with close relationship with each country’s government to integrate its activities into the nation’s educational vision and policies.

It is also observed in the analysis that a variety of ICT-integrated training environments have been created to provide more effective ICT training. As indicated above, teachers tend to integrate ICT in their teaching if they experience ICT skills as a learner (Collis & Jung, 2003). Teacher training approaches in this paper show that many cases adopt ICT into their training process not just as content of the training but rather as an integrated training environment and thus allow teachers to experience ICT-based pedagogies. The cases of VHS and Captured Wisdom are those examples. One UK site has compiled cases of technology-integrated pedagogical strategies for teachers (http://www.educ.cam.ac.uk/tips/reports.html) and made suggestions in incorporating ICT into the curricula. More hands-on experiences that relate ICT to the achievement of wider pedagogical objectives are suggested at the initial training level and at the advanced level, the provision of opportunities for teachers to produce and disseminate ICT-based instructional materials is recommended.

Another possibility with the use of ICT in teacher training is that it connects teachers to a larger international teaching community. Several cases analyzed above operate the Internet-based teachers’ learning community and support teachers to interact with peer teachers as well as teachers in other countries. Moreover, they invite experts to provide expertise to teachers through online forums or emails. Best practices in using ICT in teaching and learning and successful pedagogies are now being shared among teachers scattered around the world.

While these possibilities are observed in ICT teacher training approaches, those experiences also impose challenges to teachers, teacher training institutions, and nations. Some of the challenges are presented below.

First, teacher training approaches need to adopt cost-effective strategies. Most nations have limited resources for teacher training and must make decisions based on cost-effectiveness. The teacher training experiences provide several cost-saving strategies (Collis and Jung, 2003):

- Maximize use of computer facilities in training centers to lower user contact hour costs through efficient scheduling. Outside training hours, open computer labs to the public for a small fee (as Uganda has planned in the Connect-ED project).
- Standardize on hardware and software and negotiate best prices with vendors. Complementary peripheral devices can mean savings in hardware costs and free, public-domain software lowers costs. Some vendors include ICT skills training in the purchase price.
- Share Web-based resources and training materials with other training institutions.

Second, support and investment in teacher trainer training is important for the adoption of ICT for teacher training. The experiences of NIE, VHS, and LearnLink indicate the importance of providing a variety of both formal and informal teacher trainer training systems so that trainers could take advantage of the methods which suit them best. Experience shows that to enlist staff support and involvement, it is useful to:

- Employ a variety of teacher trainer training methods, ranging from face-to-face workshops to online self-study programs depending on training objectives and environments.
- Integrate informal support into the formal teacher trainer training system so that the less experienced teacher trainers can obtain timely assistance.
- Plan to provide multiple incentives such as workload reduction, recognition and reward in faculty evaluations, increased research allocations to encourage use of ICT in teaching, and compensation for those providing educational or technological assistance to others.
Finally, national and international partnerships across public and private sectors need to be formed to share resources, knowledge, and experiences in providing effective and efficient ICT teacher training. ICT teacher training efforts made by organizations have shown training advantages of international collaborations and benefits of using ICT for teacher training. One of such advantages of international collaboration is to bridge the gap between ICT haves and have-nots. Governments or teacher training institutions seeking to promote national and international partnerships should:

- Provide incentives for private and public participation and investment in ICT teacher training.
- Remove legal barriers – for example, classroom attendance requirement – to online training courses shared by several countries or institutions.
- Incorporate a plan to lesson the digital divide that may exist in participating countries or training institutions.

A well-designed teacher training program is essential to meet the demand of today’s teachers who want to learn how to use ICT effectively for their teaching. This paper was an attempt to report popular approaches of using ICT in teacher training programs and organized them into four categories. However, to provide proven strategies to design effective ICT teacher training programs, we need empirical research in the use of ICT for teacher training and professional development.

First, we need more studies comparing effectiveness and cost-effectiveness of different training approaches. A few attempts have been made to investigate effectiveness or cost-effectiveness of online ICT teacher training over traditional face-to-face ICT training based on empirical data (Jung & Rha, 2000; Jung, 2003). One of those studies reports that ICT training, regardless the modes of the training, has contributed to increasing the quantity of ICT use in teaching and the Internet-based online training tends to encourage teachers’ Internet use in teaching (Jung, 2003). While these studies are useful in providing overall effectiveness or cost-effectiveness of different training modes, not much research has been conducted to assess effectiveness or cost-effectiveness of specific pedagogical approaches to ICT teacher training which have been discussed in this paper. We need future studies that include the investigation of an application level of long-term effectiveness or cost-effectiveness of different ICT teacher training approaches using more elaborated criteria.

We also need more empirical studies focusing on factors affecting learning process, satisfaction and achievement in different teacher training approaches. Given the fast development of ICT, we can expect that ICT will bring changes in forms of teacher training throughout the world. It is thus important for teacher trainers and policy makers to understand the factors affecting effectiveness and cost-effectiveness of different approaches to ICT use in teacher training so training strategies can be appropriately explored to make such changes viable to all.

Finally, more attention should be paid to specific roles of ICT in offering multimedia simulations of good teaching practices, delivering individualized training courses, helping overcome teachers’ isolation, connecting individual teachers to a larger teaching community on a continuous basis, and promoting teacher-to-teacher collaboration. Intended outcomes as well as unintended results of using ICT for teacher professional development need to be explored.

References


SMALL GROUPS

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Groups are the workhorse of interactive teaching -- spontaneously formed teams with specific tasks to be accomplished in a short time. Tasks may be about idea-generating, brainstorming, information-sharing, question-gathering, list-making, or problem-solving. Typically, one person acts as recorder, noting and summarizing the group’s output, and reporting to the larger group afterwards. The teacher stays out of the way, but monitors the progress of the groups and offers procedural guidance and content suggestions as needed.

Best used to stimulate individual input / break the ice at the outset / warm up the class to a new topic / measure previous knowledge and experience / generate lists of questions / gather opinions and identify preconceived ideas / rank-order items to create an agenda / obtain feedback on virtually any topic / tackle a wide range of problems / elicit ideas on classroom procedures ensure individual “air time,” regardless of class size and time restraints.

Group size: The size is best kept between three and six members. If groups are larger, members tend to seek smaller, less confusing subgroups. But even your largest class can be divided into several small groups; it’s quite possible, for instance, to divide 120 people into 20 small groups and spread them across a large space.

How to proceed

Foreshadow the process. Most adults are familiar with teacher-centered schooling, and they appreciate a few words of explanation whenever you ask them to become active participants. Be quite explicit in your introduction: “Now that I have laid out my plan for the day, I’d like to hear what you think. Since we are quite a large group it would take too long for everyone to be heard in turn, so let’s do it in small groups. You’ll be sitting with four or five other members for a few minutes to respond to a question I’ll post. One of you will be the recorder and be asked to report to the large group on what you’ve each had to say. This way everyone will be heard,
first in the small group, then by way of the recorder. How does that sound? Do you have any questions before we proceed?”

**Form groups.** Invite participants to turn to others sitting nearby and form groups of four to six. Give specific directions, such as “Turn to the people sitting near you,” or “Get together with someone you know least,” or “This time, I’d like you to team up with people who work in settings similar to yours.” Initially, this grouping will take a bit of time, but don’t let that deter you. The benefits of learner-involvement compensate for the time spent; adults become quite adept at choosing groups and on subsequent occasions groups are formed with little delay.

**Set time parameters.** Four to six minutes are good time spans for small tasks. On average, each group member has a minute of air time. Anything less leads to crowding; anything longer invites tuning-out, wandering off topic, and social chit-chat. Time restraints help groups focus on the task. You must gauge this element carefully and expand and contract the time allowance to suit the task and the maturity of the participants.

**Guide the process.** This applies mainly to inexperienced groups. Following the previous example of agenda-building groups, ask participants to take a moment to introduce themselves, then go around the circle so that each person can state one item to be added to the agenda. Those who are satisfied with the existing agenda should say so. Then it’s the next person’s turn, until every member has had equal air time.

If a group has spare time, go around again to catch additional ideas. Ask groups to assist their recorder in registering each contribution. You may ask that recorders add contributors’ names in brackets next to each item for future reference. To sharpen the focus on the task, you can further stipulate a specific number of items to be generated.

**Monitor progress.** Circulate from group to group to unobtrusively listen in as they go about their work. This is not a time to relax: it is vital that you are alert to monitor each group’s progress, ready to make brief interventions to steer groups and recorders towards the accomplishment of their task. But take
care not to interfere too much, since a group quickly develops its own personality.

*Act as timekeeper.* Time does fly when buzz groups get together. By announcing “halfway through” or “two minutes remaining” you help groups with their task and remind everyone of their share of air time. Should you sense that more time would be of benefit, feel free to announce a schedule change.

Examples: “You are all working so hard – please take an extra three minutes to complete the list. I remind each group member to ensure that your views have been accurately recorded”; “If your group is already finished, please look over your list once more, and make any additions you think are important.”

*Ask recorders to report.* If you are working with just a handful of groups, the simplest procedure is to ask one recorder after another to stand up and report. Alternatively, ask the recorders to post the summary sheets of their group’s findings on a blank wall.

*Process information.* If you want people’s input, you need to acknowledge their contributions and then act on them. In the agenda-building example we have used here, the negotiations could now center on incorporating the learners’ agendas with that of the teacher.

**Variations**

- Small groups can be used as a warmup with new groups. Ask group members to first introduce themselves and then share one or two expectations for the course. This serves as a starting point for a discussion on what is desirable and possible to accomplish. Adult learners appreciate being involved from the outset and in having a say in how time is spent.

- Use prior to a lecture. Groups can tell you what’s already known about the topic, what people expect to learn, and which aspects are of particular interest.

- Intersperse a lecture with small groups to foster comprehension and bring out questions.

- Conclude a lecture by asking groups to integrate new information with previous learning. They can be asked to
identify remaining problem areas or explore practical applications of theoretical material.

✓ Preceding or following a complex course component, ask groups to collect questions and issues that need clarification.

✓ Groups are an ideal vehicle for various assessments. In a supportive climate, people will make constructive comments on course content and instructor performance, as long as there is a safe way to do this. Working in small groups, free-style or with an evaluation form, participants can provide valuable information – without having to face the teacher directly. Recorders, speaking on behalf of others, are more at ease in reporting sensitive information.

Excerpted from *The art of teaching adults.*
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