Volume

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PRINCIPLES
OF RESOURCE DESIGN
FOR LITERACY TRAINING

Unesco Principal Regional Office For Asia and the Pacific, Bangkok, 1988


1. LITERACY PROGRAMME - EDUCATIONAL PERSONNEL TRAINING - ASIA/PACIFIC. 2. LITERACY PROGRAMMES - CURRICULUM DEVELOPMENT - ASIA/PACIFIC. 3. LITERACY PROGRAMMES - INSTRUCTIONAL MATERIALS - ASIA/PACIFIC.

379.24
Volume 2

PRINCIPLES OF RESOURCE DESIGN FOR LITERACY TRAINING
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INTRODUCTION TO THE SERIES

The Need for Literacy Training Materials

The Asia and Pacific region with its ancient civilizations and cultures has become a centre of illiteracy, which comprises three-quarters of the world’s illiterate population. In keeping with its goal to eradicate illiteracy by the year 2000, UNESCO launched the Asia-Pacific Programme of Education for All (APPEAL) in February 1987.

The Programme has identified the following problems regarding literacy programmes in Asia and the Pacific:

a) Severe illiteracy problems persist among rural communities, urban slum dwellers, the physically disabled and early school leavers;

b) The present training tends to be ad hoc, lacking systematic overall national planning;

c) Trainers do not always have the most suitable training materials for specific groups;

d) There is inadequate development of programmes to train teacher trainers;

e) Institutional infrastructures for training are very weak in most of the countries.

In spite of these problems, there are several major strengths in the region:

a) Governments of all countries in the region have recognized the importance of literacy and continuing education programmes and have pledged their support;

b) At the training level, there are large numbers of well-qualified and dedicated instructors;

c) There are many publications available for training adult and young people in basic literacy skills.

One way in which APPEAL aims to accelerate the eradication of illiteracy is through the improved training of literacy personnel.

Identification of Literacy Training Levels

To identify training needs and develop training plans in the context of APPEAL, UNESCO/PROAP organized a Technical Workshop for Developing Personnel Training Plans, which was held in Thailand on 16-25 September 1986. The Technical Workshop identified three levels of literacy personnel who need training:
Institutional Structure and Materials for Literacy Training

Some Member States in the region have set up national and sub-national literacy personnel training institutes. Others are in the process of establishing such institutional infrastructures. In 1987, APPEAL organized a training network to facilitate exchanges of information, documents, experience and expertise and to strengthen the institutional frameworks of the literacy personnel training institutes within the Member States. The training network is expected to support the training of literacy personnel at the regional, national and sub-national levels.

UNESCO/PROAP then organized a Regional Workshop on Development of Training Materials to develop training materials for the three levels of personnel needing training under APPEAL. Phases I and II of the Workshop were held in September/October 1987 in Bangkok, Thailand and Kathmandu, Nepal, respectively. Phase III of the Workshop was held in Harbin City, China, August 1988.

These Regional Workshops on Development of Training Materials developed the following materials, which are being published as a set of twelve volumes. The scope and training levels of these books are given below with their titles.

Since all the volumes in this series of Appeal Training Materials for Literacy Personnel are interrelated it is important that all users carefully read Volume One and Volume Two before going on to any other Volume in the series.
<table>
<thead>
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<th>Volume No.</th>
<th>Title and Scope</th>
<th>Level</th>
</tr>
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<td>All</td>
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<td>C</td>
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<td>C</td>
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<td>C</td>
</tr>
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<td>Exemplar Training Manual - Health Services</td>
<td>C</td>
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<td>All</td>
</tr>
</tbody>
</table>
The relationships between the training levels and the key elements in the set of materials are summarized in the following figure. The figure also details the links between the various levels of training personnel.

NOTE: The relationships between the training materials for levels A, B and C use:

a) Manual numbering system to be compared with the cells of the curriculum grid. (Volume 1) These numbers are examples only.
b) The base of the pyramid is the large population of people needing basic literacy training.

Literacy Training Curriculum

The development of training manuals for literacy personnel could not proceed without a well-structured, flexible curriculum framework designed to meet the needs of different clientele groups. The Regional Workshop on Development of Literacy Materials (1987) developed a set of guidelines to enable countries to design and implement a literacy training curriculum acceptable to all agencies involved in the country.
In designing the exemplar literacy training curriculum, the following criteria were considered:

a) Functional content showing logical development from concept to concept;

b) Progressively built literacy skills;

c) A concentrically planned curriculum enabling learners to repeatedly re-examine
   the main areas of functional content at deeper levels of understanding using steadily
   improving literacy skills;

D) Literacy skills sequenced in levels of progression defined in terms of specified
   outcomes.

The Materials as Exemplars

The materials described in this series are exemplars. An exemplar is a
resource that illustrates a set of principles and procedures for the development of
relevant materials by individual countries that meet local training needs.

It would be impracticable to develop exemplar literacy training lesson
materials for all countries of the region. The approach, therefore, has been to:

a) Develop a curriculum;

b) Identify four areas of functional need that appear to represent common areas of
   concern among the countries of Asia and the Pacific;

c) Produce exemplar lesson materials for these four areas only;

d) Provide guidelines to facilitate the development of effective national literacy
   training programmes.

It is intended that the four exemplar training materials be used as examples
of how such materials may be designed and produced. Each country may write or adapt the
training manuals for its own use. To help this process, specifications have been provided
for a range of additional functional literacy topics. In addition, support material has
been provided to aid in the design and implementation of a total national programme.

The important feature of the exemplar lesson materials is that they build in
step-by-step guidelines and instructions for teachers (Level C personnel). This has
been done on the assumption that it would not be practicable to provide comprehensive
training for the many thousands or hundreds of thousands of literacy presenters
employed in most countries either as government employees or volunteers.
Each exemplar manual may be produced in two editions, one for the literacy
learner and one for the literacy presenter/teacher. The training needs of
Level C personnel are mainly addressed in the Teacher’s Guide incorporated into
the special teacher’s edition of each manual. A separate learner’s book could be
produced simply by separating these materials.

The main aim of the twelve-volume set is to facilitate the development of
a totally integrated and coherent literacy training system within a given country.
At the same time, the materials may help in establishing some useful, internationally acceptable parameters for such programmes.

The relationships between the essential elements of the scheme are illustrated below.

The diagram suggests how a national literacy training curriculum may be implemented through the development of resources for the three levels of literacy training personnel. It also suggests the importance of establishing strong links between national programmes and the regional literacy network established under APPEAL. The importance of developing such a scheme in relation to continuing education and to the universal primary education movement is also indicated.

Key: EOI = Eradication of Illiteracy
     UPE = Universal Primary Education
The Aims of the Scheme

By applying a set of common principles of management and design that is useful to all countries, the scheme provides:

a) Guidelines for countries wishing to design a total management literacy training programme that brings all elements and all levels together in a systematic way without imposing a particular structure;

b) Guidelines for the development of a systematic curriculum that could meet the needs of individual countries;

c) A set of principles that may be useful in developing a systematic programme for the training of literacy personnel;

d) An approach to instructional design that applies the principles of andragogy to the organization of suitable resources for teachers and learners;

e) Guidelines for increasing the effectiveness of the literacy training materials already in use in the countries of the region;

f) Suggestions for a system that may help literacy teachers present effective lessons through the encouragement of maximum participation by the learners;

g) An introduction to a system of design that could facilitate assessment and evaluation of a national literacy programme;

h) Help in developing useful, internationally understandable parameters for the implementation of literacy training programmes.

As mentioned earlier, the materials in this series were prepared by literacy training experts in Asia and the Pacific working together, sharing their experiences and expertise. A list of the experts participating in the preparation of these materials is found in the Annex to Volume One. Nevertheless, these materials must be used by the countries in the Region as exemplars to develop their own materials based on their national goals and local needs in the context of APPEAL.
PREFACE

This book is the second in the series of twelve volumes of APPEAL training materials for literacy personnel. Its purpose is to:

a) Establish principles of instructional design appropriate for the development of resource materials for literacy personnel;
b) Review the roles and characteristics of exemplar literacy training manuals (Volumes 5 to 8 of this series);
c) Explain the function of the specifications given for additional manuals (Volume 9);
d) Describe the results of a preliminary evaluation of the scheme.

This volume is introduced as a resource for senior administrators and supervisors of literacy training programmes. Its aim is to facilitate the development of literacy training materials suitable for local and national needs. Because the training manuals described in this book and published as Volumes 5 to 8 of this series are only exemplars, they should be thought of as resources for developing training materials that are relevant to the needs of each member country. By applying the principles of instructional design described in this book, literacy trainers can produce effective resource materials using a systematic design approach.

The APPEAL training scheme stresses that literacy training manuals should be the vehicles for implementing a rationally organized literacy training curriculum. They should not represent isolated units of work. A national curriculum should be designed using the same systematic educational principles as the manuals themselves. These curriculum principles and procedures are described in Volume 1. Volume 1 also shows how member countries can establish a literacy training curriculum that meets local and national needs.
Chapter One

PRINCIPLES OF INSTRUCTIONAL DESIGN FOR THE DEVELOPMENT OF EXEMPLAR MANUALS

A. The Systems Approach in Education

Teaching involves modification of the behaviour of an individual learner. Good teaching achieves this behavioural modification in a planned and systematic way: the new behaviours to be acquired are known and prescribed, and the content, strategies and resources to effectively achieve these changes are carefully thought through. Procedures to assess the degree of achievement of the behavioural targets or objectives are included in the overall plan. Within these procedures are methods to check or evaluate the effectiveness of the teaching as a whole and in its individual elements. Taken in turn, the steps in the systems approach to the organization of a teaching programme are as follows (the steps are as numbered as in Figure 1.1):

![Diagram of the Systems Model of Teaching](Meyer,1979)

**Figure 1.1** The Systems Model of Teaching (Meyer,1979)
Step 1: Determination of Entry Behaviour: Before an appropriate teaching sequence can be developed, it is necessary to know as much as possible about the learners for whom the sequence is designed. Are they from the country or the city? Are they mainly the rural poor? And so on.

Step 2: Selection of Objectives: This is a vital step in the organization of any teaching programme. Clear statements of objectives indicate to both teacher and learner the scope of the programme and the precise knowledge, skills and attitudes to be acquired and assessed.

Step 3: Selection and Sequencing of Content: Once the objectives are determined, subject matter can be selected and sequenced in a way that will maximize the opportunity for everyone in the programme to achieve these objectives.

Step 4: Strategies, Groupings, Time, Pacing and Resources: A strategy is the general type of teaching approach to be adopted for each topic, e.g., lecturing, small group work or practical workshop. Method means the precise activity involved. For example, within a small group strategy, methods might include discussion, role play or answering a quiz. Only after each content item has been matched against strategy and method, can groupings and time and space allocations be considered. At this stage too, the required resources should be specified including human resources, and physical requirements, including learning materials, should be enumerated. Of course, all aspects of Step 4 must be fully consistent with the decisions made in Steps 2 and 3, and in full knowledge of the learners’ entry behaviour as determined in Step 1.

Step 5: Assessment of Achievement: The assessment aspects of a teaching programme should be carefully pre-planned. They should be entirely determined by the stated objectives and be consistent with content, methods and resources.

Step 6: Evaluation of Teaching Effectiveness: Systematic methods to obtain information on the effectiveness of all aspects of teaching are essential elements of a good programme.

Interaction Between Steps 1 to 6: Reference to Figure 1.1 shows that all steps in a systems model of teaching are interactive. Decisions made at any one stage of the process influence decisions made at any other stage. This implies that steps in the system are not sequential in practise and that all elements should be planned simultaneously. It shows, moreover, that teaching is a broad area of concern involving both presentation and management.

B. Systems Theory and Manual Design

While the systems approach to teaching can be and is frequently applied to conventional programmes, the degree of application varies according to the views of individual course designers. In the case of modular manuals, which involve a very systematic form of teaching and learning, the application is total. The manuals are planned and designed with a systems approach always in mind. In a modular design, each step of the systems model must be followed as summarized below:

1. Entry (starting) behaviour of learner analysed;
2. Objectives specified;
3. Content selected and sequenced;
4. Learning activities designed;
5. Continuous assessment built-in;
6. Effectiveness of the manuals evaluated.

These are, in effect, the classical steps of the systems approach to course design.

Systems theory in manual design, however, is applied in an even more precise way. It is possible not only to view a total programme as a system, but each manual can be organized as a series of subsystems. The diagram in Figure 1.1 can be simplified to a three-step sequence with an input phase (the objectives and content), a processing phase (involving interactions with the content), and an output phase (demonstrating achievement by producing something tangible). In summary, learning activities within a manual can be designed as an input-process-output sequence, which is in fact a condensed systems approach.

The learning sequences in a manual can be thought of as linear chains of INPUT - PROCESS - OUTPUT (IPO) cycles, linked together as shown in Figure 1.2 below:

![Figure 1.2 A Systems Approach to the Design of Learning Materials (Meyer, 1979)](image)

For example, in any given manual designed for six hours of active involvement, there may be as many as twelve or more IPO cycles.

Input is the information presented to a learner for consideration or action; it is the objectives and/or content of a segment of work. A process is some form of interaction between a learner and the content. Output means a demonstration of achievement by the production of something tangible: the demonstration of a new skill, construction of an object, written preparation of a report.

A simple example of an IPO cycle would be the following:

1. Input: Listening to a five-minute audio recording of a lecture on how to prepare a script;
2. Process: Identifying and/or rating certain characteristics of the programme with the aid of a checklist;
3. Output: Outlining the headings for a script for an original five-minute audio programme.
As Figure 1.2 implies, the output of one IPO cycle feeds into the next. It also feeds back to the input phase of that cycle, because the output phase is a practical manifestation of the input phase. This means that the input of each IPO cycle is not only the underlying generator of its own cycle, but also of the next cycle.

This simple design for the linear events in a learning sequence has very important advantages.

1. Each IPO cycle is a stimulus-response dyad with the input representing the stimulus and the process and output representing the combined elements of the response;
2. It is easy to see, therefore, that reinforcement can be built into each part of the response phase. That is, rewards can be provided (e.g., through encouragement or success) during the processing and output phases;
3. Awareness of IPO cycles in designing learning resources ensures that the instructional material is broken into small steps and that all relevant elements are brought together in time and space;
4. Because each IPO cycle includes at least two stages involving overt behaviour (processing and output), it is very easy to ensure that the learner is provided with feedback following the performance of a task or skill;
5. A variety of learning experiences can be built-in to the sequence, which will sustain interest and motivation and thus enhance the learning process.

In any learning sequence, the way information is presented during the input phase, the method used for processing, and the type of output required should vary as much as possible from one IPO cycle to the next. Structuring the learning sequence in a training manual around IPO cycles, therefore, ensures variety and so enhances the learning process.

This type of design is effective for programmes packaged in almost any medium from printed formats to television programmes and other electronic media. If literacy training materials are based on these principles, they will almost certainly succeed.

C. Steps in Designing Literacy Training Manuals

A systems approach has been used to design the exemplar literacy training curriculum. A curriculum grid (Volume 1) has been planned based on 24 cells, with each cell representing a modular manual. This approach ensures that many of the steps normally followed in the design of modular training manuals are completed before the specific content of any particular manual is identified. The overall steps in the production of modular materials, such as the manuals to be developed for this programme, are shown in Figure 1.3, which is taken from G. Rex Meyer’s Modules From Design to Implementation (Manila: Colombo Plan Staff College, 1984, p. 55).
1. Assess Need for Developing a Module
2. Decide Module Format
3. Identify and Describe Characteristics of Learners
4. Develop Objectives of Modules in Behavioural Terms
5. Develop Criterion Measures of Learning Outcomes
6. Analyse Skills and Knowledge Related to Objectives to be Included in the Module
7. Select Content
8. Select Instructional Activities and Media
9. Sequence Learning Activities and Develop Module Prototype
10. Tryout Module with a Sample of Target Group
11. Analyze Tryout Data for Revision of Module
13. Revise

Figure 1.3. A Flow Chart for the Design and Development of a Module
Several of the steps listed in Figure 1.3 were completed at least in part during the processes of curriculum development outlined in Volume 1. These include steps 1, 3, 6, and 7. The precise objectives of each manual (step 4) emerge logically from the overall objectives of the curriculum. The place of the manual in the teaching sequence and the criterion measures (step 5), the instructional activities (step 8), and the sequencing of the activities (step 9) follow logically from the previous steps.

D. Structure of Each Training Manual

Each exemplar training manual has been produced in two editions, one for the learner and one for the teacher. The structure of each manual is probably best explained by referring to the content of the teacher’s edition.

The content is organized into eight sections, the first six of which are described below:

1. Title of the manual;
2. Place of the manual in the teaching sequence: Its co-ordinates and sequential location on the curriculum grid;
3. Rationale: Justification in terms of literacy and functional needs of the learners;
4. Statement of Purpose: The role of the manual in consolidating the learning that has gone before; its place in the curriculum, and its function in the overall literacy training programme;
5. Statement of Aim: The developmental aims to be achieved by the learners as a result of studying the manual;
6. List of Objectives: The general objectives to be achieved by the learners as a result of studying the manual. These are expressed in behavioural language so that outcomes can be readily observed and discussed.

These six elements are shown for a draft of one manual, termed Manual IA.2: *Extra Money for the Family* in Table 1.1 on the next page.
Table 1.1 An Example of the Six Introductory Elements of an Exemplar Training Manual

**MANUAL IA.2**

Curriculum Topic: Supplementing Family Income
5th of 24

1. **Title of Manual**: No.IA.2: EXTRA MONEY FOR THE FAMILY
2. **Place of the Training Manual in the Teaching Sequence**

<table>
<thead>
<tr>
<th>Levels</th>
<th>Content Areas</th>
<th>Level I (Basic Level)</th>
<th>Level II (Middle Level)</th>
<th>Level III (Self-Learning Level)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>I.1</td>
<td>I.2</td>
<td>I.3</td>
</tr>
<tr>
<td></td>
<td>A. Family Life</td>
<td>IA.1 1</td>
<td>IA.2 5</td>
<td>IA.3 9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Extra Money</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>for the Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B. Economics and Income</td>
<td>IB.1 2</td>
<td>IB.2 6</td>
<td>IB.3 10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C. Health</td>
<td>IC.1 3</td>
<td>IC.2 7</td>
<td>IC.3 11</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D. Civic Consc</td>
<td>ID.1 4</td>
<td>ID.2 8</td>
<td>ID.3 12</td>
</tr>
<tr>
<td></td>
<td>iousness</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. **Rationale**

In adult literacy programmes, Family Life Education is one of the more important content areas. Participants in these programmes require certain literacy skills to develop awareness and positive attitudes towards raising the quality of family life.

4. **Purpose**

The purpose of this Manual is to consolidate literacy skills developed in previous manuals IA.1 to ID.1 of the literacy curriculum using a combination of learning activities involving reading, writing and numerical calculation.
5. **Aims**

Studying this Manual will enable learners to acquire literacy skills that will increase their appreciation of the importance of finding alternative means of increasing family income.

6. **Objectives**

After completing this Manual, learners should be able to:

- a) Discuss the importance of increasing family income;
- b) List some ways to supplement family income;
- c) Determine which of these methods they can use;
- d) Read simple sentences relevant to supplementing family income;
- e) Write these sentences with correct punctuation marks;
- f) Write the numbers 101 to 200 in sentences about family income;
- g) Add and subtract two-digit numbers in simple problems relevant to the family income.

The seventh part of the manual is the programme of learning activities. These are arranged in a series of three to five units, each containing several learning activities. Manuals may contain as few as five or as many as 15 to 20 activities to be covered in about six hours of instruction. Each unit of work has its own clearly specified objectives and the activities are arranged as a linear sequence of I-P-O cycles. Pacing and grouping are important; in the teacher’s guide, the approximate time needed for each activity is indicated along with the way the class is to be grouped. As an example of this arrangement, the structure of an activity from one unit of a manual is shown in Table 1.2.

**Table 1.2 The Structure of an Activity from One Unit of Work from Exemplar Training Manual 1A.2**

<table>
<thead>
<tr>
<th>Family Life: Extra Money for the Family</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit I: Alternative Ways of Supplementing Family Income</strong></td>
</tr>
<tr>
<td><strong>Objectives:</strong></td>
</tr>
<tr>
<td>a) Discuss the importance of increasing family income;</td>
</tr>
<tr>
<td>b) List some ways to increase family income;</td>
</tr>
<tr>
<td>c) Read simple sentences relevant to supplementing family income;</td>
</tr>
<tr>
<td>d) Write these sentences with correct punctuation marks.</td>
</tr>
</tbody>
</table>
### Activity 1: Sharing Ideas/Experiences and Literacy Skills

<table>
<thead>
<tr>
<th>IPO</th>
<th>Time (min.)</th>
<th>Step</th>
<th>Teaching Notes</th>
<th>Grouping</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>I P</td>
<td>(25)</td>
<td>1</td>
<td>Draw from learners what they think are the important reasons for increasing family income. Let them share their experiences about earning extra income for the family. (Discussion)</td>
<td>Whole class</td>
<td>The learners</td>
</tr>
<tr>
<td>O</td>
<td>2</td>
<td>2</td>
<td>Using simple sentences with correct punctuation marks, write on the board ideas that frequently emerged from the discussion. Introduce simple sentences on extra income. Read each sentence slowly one or more times.</td>
<td>Whole class</td>
<td>Chalkboard/ posters</td>
</tr>
<tr>
<td>I P</td>
<td>45</td>
<td>3</td>
<td>Ask learners to read each sentence orally as a group.</td>
<td>Whole class</td>
<td>Chalkboard</td>
</tr>
<tr>
<td>P</td>
<td>4</td>
<td>4</td>
<td>Ask the group to work in pairs and write one simple sentence with correct punctuation marks about increasing family income.</td>
<td>Pairs</td>
<td>Writing materials</td>
</tr>
<tr>
<td>O</td>
<td>5</td>
<td>5</td>
<td>Learners read the sentences they have written on worksheets to the group.</td>
<td>Working alone</td>
<td>Writing materials</td>
</tr>
</tbody>
</table>
The eighth section of the teacher’s guide contains a reproduction of the learner’s edition arranged in the same sequence of units and activities. All teaching steps are numbered and described. The learner’s edition, however, contains only titles and statements of objectives from each unit, titles and instructions for the activities (where appropriate) and response spaces for the learners. Teaching steps and response are numbered in parallel in the Teacher’s Guide and the Learners Workbook.

E. The Importance and Role of the Teachers’ Guide

The teacher’s editions of the exemplar training manuals have been developed in considerable detail to give step-by-step guidance on the presentation of the lesson materials. The teaching notes on each IPO stage give information on topics, timing, teaching steps, grouping, resources to be used and methods to be followed.

This detail is considered necessary because, for many literacy teachers, it is virtually the only help and guidance they will have. In countries employing many hundreds or thousands of literacy teachers, it is impracticable to ensure that they will all be trained centrally or even attend a short-duration training camp. Most will have to rely almost entirely on the help of the notes provided in the teacher’s guide section of each manual.

Of course, the learner’s edition of each manual is much shorter and easier to produce because it lacks the extra teacher’s material. In most cases, the teacher’s edition is several times the length of the learner’s edition.

Chapter Two
EXEMPLAR MANUALS:
THEIR SELECTION AND ROLE

The principles of design applied in the development of the exemplar manuals were discussed in Chapter 1. This chapter considers in more detail the criteria used to select the four topics from the literacy training curriculum. It briefly describes the four manuals and their place in the curriculum sequence and discusses their roles and function in the overall training model.

A. Selection of the Manuals

Because the purpose of these manuals is to show how a systematic literacy training programme may be designed and implemented, only a small number need to be produced as exemplars. It is important to stress again that the manuals are NOT intended for use in their present form in actual literacy teaching sessions. Their role is to show how a coherent set of systematically designed materials can form part of an overall literacy training curriculum.

The aims, objectives, content and structure of a training curriculum were described in Volume 1. As this curriculum is based on a modular approach with a minimum of 24 curriculum cells, each represented by one training manual, the presentation of four carefully selected manuals is sufficient to show how actual learning materials and their related teacher’s guides may be designed and produced. Accordingly, four representative cells of the curriculum corresponding to four manuals were chosen according to the following criteria:

1. Representative of the three levels of literacy skill;
2. Representative of the four major areas of functional content;
3. Spaced across the 24 cells of the curriculum grid to illustrate significant progress in literacy achievement from manual to manual;
4. Indicative of critical points in the development of literacy skills.

B. Place of the Four Exemplars in the Overall Curriculum

The position of the four selected exemplar manuals on the curriculum grid is shown in Figure 2.1.

The functional content and literacy skills treated in each of the four manuals are listed briefly in Volume 1, along with similar lists for the other 20 manuals in the total series. Table 2.1 briefly outlines the significance of the four exemplar manuals in the total curriculum.
### Figure 2.1 Positions of the Four Exemplar Training Manuals in the Overall Literacy Training Curriculum

### Table 2.1 The Significance of the Four Exemplar Manuals in the Overall Literacy Training Curriculum

<table>
<thead>
<tr>
<th>Manual Reference</th>
<th>Significance in the Curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grid Reference: IA.2 Learning Step 5 out of 24 Family Life:</td>
<td>This manual is concerned with very basic skills, such as reading and writing simple sentences, numbers up to 200 and simple applications of the rules of addition and subtraction. It represents a key point in the programme in terms of motivation following only 24 contact hours of previous instruction. There is some danger of participants dropping out at this point and, therefore, a highly motivating theme such as family income has been selected for the functional content. This manual represents only the second opportunity for learners to consider aspects of family life. There remains four more such opportunities in the higher levels of the programme.</td>
</tr>
<tr>
<td>EXTRA MONEY FOR THE FAMILY</td>
<td></td>
</tr>
<tr>
<td>Manual Reference</td>
<td>Significance in the Curriculum</td>
</tr>
<tr>
<td>------------------</td>
<td>--------------------------------</td>
</tr>
</tbody>
</table>
| Grid Reference: ID.3  
Learning Step 12 out of 24  
Civic Consciousness: Public Property  
Title OUR FORESTS | This is a critical manual in terms of literacy development because it is the twelfth and last module at literacy level I. After completing this manual, learners will have experienced 72 contact hours and should have achieved basic skills including reading and writing basic paragraphs and simple stories and have some degree of competence in applying the four rules of arithmetic. In terms of functional content, the example of forestry is the third opportunity to consider issues in civics and so this area of awareness should be becoming more apparent to the learners. |
| Grid Reference: IIB.2  
Learning Step 18 out of 24  
Economics and Income: Village Co-operatives  
Title VILLAGE COOPERATIVES | At this point, learners will have experienced just over 100 previous contact hours and should be confident about reading, writing and discussing more extended material. They should also be able to solve simple numerical problems relevant to the ideas emerging from their reading and writing experiences. At this point (late in level II), consideration of previously acquired skills is especially important if learners are not to regress. Motivation is also a factor here and so once again an attractive, highly motivating theme has been chosen to hold the interest of learners. This is the fifth topic within the area of economics and income and literacy skills should now be applied to the concepts of this area with some degree of competence. |
Table 2.1. The Significance of the Four Exemplar Manuals in the Overall Literacy Training Curriculum (continued)

<table>
<thead>
<tr>
<th>Manual Reference</th>
<th>Significance in the Curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grid Reference: IIIC Learning Step 23 out of 24 Health: Community Health Services</td>
<td>Level III of literacy skills prepares participants to learn on their own without the help of a teacher. At this particular point (learning step 23 out of 24), that goal should be virtually achieved. This manual is probably even more important in the programme sequence than the next and final one, because learners see that the end of the programme is near and are highly motivated to finish, frequently more so than in the last teaching session where there may be some lessening of intensity of involvement. By this stage, the learners should be able to read and comprehend quite advanced material, be able to apply the rules of arithmetic to a range of real-life problems, and have acquired a good understanding of a broad range of concepts across the four areas of functional knowledge.</td>
</tr>
</tbody>
</table>

As the information summarised in Table 2.1 indicates, the four exemplar manuals represent four turning points in the development of literacy skills and in the growth of functional knowledge. Each manual is part of a continuously unfolding learning sequence and is not an *ad hoc* unit developed in isolation. More significantly, each manual is one element in an overall systematic training programme and should be reviewed with the overall scheme of that programme in mind.

The teacher’s editions (including the learner’s editions) of each exemplar manual have been published as separate volumes. The cover designs of the four manuals are shown in Figure 2.2.

C. Role of the Materials as Exemplars

The four selected manuals and the overall curriculum plan are exemplars in a number of ways and for several categories of personnel as outlined below.

1. **Level A Personnel: National Policy Makers** For these people, the manuals are intended as exemplars to:
   a) Show that a literacy training programme should be systematically designed from the grassroots to the most senior levels of management;
   b) Show that a single overall approach, in this case the systems approach, can be applied to all levels of a literacy training programme, i.e., from an individual activity in a single contact session to the highest levels of management;
c) Indicate that lesson materials need to be coherently organized and sequenced so that they contribute to a systematic curriculum plan;
d) Suggest that application of a systematic approach to management and design could reduce costs by:
   i) removing redundancies;
   ii) streamlining administration;
   iii) making the training of trainees (teachers) more efficient and effective;
   iv) improving efficiency and effectiveness of the actual teaching sessions.
d) Indicate how lesson materials can be used not only to provide resources for participants but also for their teachers;
e) Suggest possibilities for a low-cost approach to the training of literacy teachers through the development of a series of teachers’ guides, which are integrated with the lesson materials and are systematically designed and arranged as part of a coherent curriculum plan.
f) Ensure that consistent and coherent advice is available to all agencies involved in implementing literacy programmes both nationally and internationally.
g) Provide common ground for meaningful dialogue between international agencies contributing to literacy training networks.

2. **Level B Personnel: Supervisors, Trainers and Trainees** For this group, the manuals and the curriculum are intended to be exemplar by:
a) Giving concrete examples of how to go about developing a coherent literacy training curriculum based on a systematic approach to design;
b) Providing an example of an approach to instructional design that is relatively easy to apply, facilitates learning and provides a coherent framework for the training of level C personnel;
c) Showing how level B personnel can replace ad hoc systems and materials with a well-organized programme coherently planned and systematically organized according to some agreed approach (e.g., the systems approach);
d) Providing exemplars of how to write and produce learning materials for adults in literacy training programmes;
e) Providing exemplars of how to design and write materials for trainers;
f) Suggesting an approach to training the trainers using teacher’s guides, which could be helpful in situations where it is not practicable to provide training workshops (or training camps);
g) Providing a model that could be applied in the design and development of training workshops for literacy teachers in cases where such workshops are practicable and
Figure 2.2. Covers of the Four Exemplar Training Manuals Developed During Phases I and II of the Workshop
to ensure that the teacher’s guides and the workshop experiences are fully complementary;

h) Helping level B literacy personnel clarify and define their roles and functions within an overall management system;

i) Providing a systematic mechanism for level B literacy personnel to effectively interact with all agencies involved in literacy training;

j) Providing a coherent system for effective supervision of level C personnel.

3. **Level C Personnel: Trainers/Teachers/Presenters** This is the group in most need of training support. For them the proposed curriculum and the four manuals are exemplars that:

a) Show in a simple and direct way how lessons can be designed based on a system’s approach involving the application of effective learning theory;

b) Give examples of approaches that are especially suitable for adults;

c) Show how to organize and sequence lesson materials for maximum effectiveness;

d) Emphasise the importance of a coherent, systematic approach to teaching and learning and the inadequacies of ad hoc methods and resources;

e) Show how a systematic curriculum provides a framework for the effective planning and implementation of lessons;

f) Provide a plan for an approach to their own self-development and training;

g) Show the significance of an agreed approach to teaching and training in facilitating communication between individual teachers, and between level C personnel and personnel at other levels of a national training programme.

D. **How Individual Countries May Respond to the Exemplar Curriculum and to the Exemplar Manuals**

It should be again stressed that the four manuals have not been designed for use in actual teaching sessions but as exemplars of 1) how such materials relate to a systematic curriculum, and 2) an effective approach to instructional design appropriate for adults undergoing literacy training.

It is unlikely that any country would wish to use the manuals for teaching purposes without some adaptation. More fundamentally, however, some countries may wish to make substantive changes to the aims, objectives, structure and content of the literacy training curriculum itself. Some such changes could be brought about by simply substituting new topics within selected cells of the curriculum grid or by adding new cells. (Refer to Volume 1.)
If the four manuals provided as exemplars are to be adapted for use by an individual country, several possibilities arise that involve altering the timing and pacing, modifying the levels of difficulty, substituting more locally relevant activities, replacing whole units, giving more processing opportunities and so on. In making such adaptations, however, the following points need to be kept in mind.

1. In their present form, the four manuals are part of a total exemplar system. Systems theory shows that if one part of a system is altered, it affects all other parts of the system. Changes to the manuals, therefore, should lead to consequential changes in other parts of the overall training programme and these changes would need to be made with considerable care. This suggests that it probably would be better to develop a completely new curriculum and to design appropriate materials for that curriculum, using the approach given in this report as an exemplar, rather than adapting just three or four titles.

2. In adapting the manuals or in writing new materials, a consistent approach to instructional design needs to be applied. The systems approach provided here is an exemplar only. Other approaches may be preferred in certain circumstances.

Another aspect of a country’s individual response relates to the issue of packaging. The present exemplar approach implies that 24 separate manuals must be produced, even more if additional cells are added to the curriculum grid. But, this need not be the case. Reference to Figure 2.3 shows that the cells of the curriculum grid, while representing individual topics and hence manuals based on a modular approach, are arranged in blocks or sets that could be joined together to produce larger units of work. So, for example, the four manuals of literacy level 1.1 (i.e., cells IA.1, IB.1, IC.1, ID.1) could be bound together in one volume, or the manuals for the three literacy levels could be bound as three separate volumes and so on. Naturally, this approach must be weighed against the reduction in flexibility.

E. Publication of Specifications for Manuals

The design and content specifications for a selected range of additional manuals from the overall literacy training curriculum have been prepared as a set of resource materials for publication in a separate volume (Volume 9). (See Figure 2.3.)

These specifications list the title, curriculum reference, rationale, purpose, aims, objectives and teaching programme for the selected manuals. The description of the programme includes a list of units and activities and the topics, timing, pacing, grouping and recommended teaching methods for each IPO step.

The purpose of Volume 9 is to extend the range of exemplar materials to provide further examples of the way the IPO design can ensure a variety of learning experiences. The specifications also provide a range of exemplars of the processes involved in materials design, which may be of benefit to various categories of
literacy training personnel particularly to those at level B (supervisors and trainers of
trainers) who may need to design and produce training manuals.

The specifications are not necessarily intended to be the basis for the development
of the manuals that will be used in teaching sessions. However, they could serve this purpose
for any country that may consider its literacy training needs would be well served by the
approach adopted in the overall literacy training curriculum proposed here.
A. Purpose of the Evaluation

During Phase II of the APPEAL Regional Workshop on the Development of Literacy Training Materials held in Kathmandu from 7 to 14 October 1987, a preliminary evaluation was undertaken of the effectiveness and suitability of the design approach adopted for the development of the literacy training curriculum and of the exemplar training manuals. Representatives of sixteen member countries were involved in the evaluation, which was conducted to:

1. Assess whether or not the overall systematic approach would be acceptable to member countries in Asia and the Pacific;
2. Assess the reactions of potential users to the type of instructional design that was applied in the development of the exemplar training materials;
3. Review techniques of curriculum and resource evaluation, which may be appropriate when assessing the effectiveness of the various elements of the APPEAL literacy training curriculum during its implementation by member countries;
4. Assess the likely responses of individual countries to the exemplar training manuals and to identify key factors that may need to be considered in developing the materials required to meet local needs;
5. Improve the quality and effectiveness of the manuals as exemplars.

B. Methods of Evaluation

The following evaluation techniques were selected and applied to test the effectiveness of the formal steps used in the development of the APPEAL Literacy Training Materials.

1. Peer review of the overall design of the APPEAL literacy training curriculum;
2. Peer review of the design and specifications of two of the exemplar training manuals during the formative stages of their development;
3. Simulated trial and evaluation of one of the exemplar manuals;
4. Field trial in a village situation of one exemplar training manual;
5. Assessment by Phase II workshop participants of the possible implementation of the approach in their countries.

Each of these methods and the outcomes of the simulated and actual field trials are briefly described and discussed in the remainder of this Chapter.

C. **Peer Review of the Overall Curriculum Design**

A peer review is the critical assessment by colleagues of curricula and learning materials during the formative stages of their development. In this instance, the developers were the resource persons involved in Stage I of the Regional Workshop held in Bangkok from 22 September to 5 October 1987 and their peers were the participants of Phase II held at Kathmandu from 7 to 14 October 1987.

The curriculum design was evaluated in two steps. Step I involved resource persons from Phase I of the Workshop and small groups of Phase II participants. The Phase I participants described and commented on an early draft of the curriculum material now incorporated into Volume 1 of this series. The small groups then critically discussed the presentations, and points of immediate concern were identified and listed. This step of the peer review process occurred early in the Phase II Workshop so that it functioned as a pre-test. Toward the end of Phase II, a more formal peer evaluation method was used (Step 2). This involved administering a structured questionnaire. The questionnaire required ratings to be given on the suitability of various parts of the curriculum design for use in the country of each participant. The following aspects were evaluated:

1. Statement of aim;
2. List of objectives;
3. Levels of literacy skill;
4. Integration of content and skills;
5. Integration of awareness, functionality (practice) and application;
6. Major content (functional/substantive themes)
   a. Family life
   b. Economics and income
   c. Health
   d. Civic consciousness;
7. Systems approach (IPO) to design of training manuals;
8. Sequence of teaching sessions (manuals);
9. Concentric arrangement of functional concepts;
10. Proportional allocation of time in ratio of 3:2:1 for levels I, II and III of literacy skill;
11. Changing proportion of literacy skill and functional content from level to level;
12. Manuals as units of instruction (modules);
13. Flexible design providing opportunity to add additional manuals (modules) to meet specific needs of individual countries.

In addition, participants were asked to respond to the following questions:

1. Does your country now have a written, standard, literacy training curriculum?
2. In what ways might the proposed exemplar curriculum need to be changed to meet the needs of your country?

3. Make any other comments you wish about the proposed exemplar literacy training curriculum.

The overall results of these two peer evaluations of the curriculum design were very positive. A few misconceptions and concerns were listed in Step 1 of the peer review process, but by Step 2 these had been largely explained and replaced by deeper understanding and more positive reactions. In response to the questionnaire, all parts of the curriculum were given favourable ratings by the great majority of participants. This suggests that there would be little difficulty in implementing this approach in member countries of the Region.

Twelve out of 14 country representatives stated that the literacy training curriculum would be suitable in their countries, either in its present form or with only small changes. The remaining two representatives suggested that while the overall curriculum approach would be suitable, some aspects might need revision to meet the needs of their countries. None of the 14 country representatives responding to the questionnaire, however, claimed that the curriculum approach would not be suitable. Answers to the general questions indicated strong support for the principles on which the proposed literacy training curriculum are based. An interesting finding was that of the 14 countries represented, nine had a written, standard, literacy training curriculum and five did not.

D. Peer Review of the Specifications for Two Exemplar Training Manuals

During Phase I of the Workshop, two of the four exemplar manuals were completed and the other two were partially completed. For these partially completed manuals, full specifications were prepared and some activities were sketched in outline. These manuals were:

1. IIB.2  :  Village Co-operatives;
2. IIIC  :  Health Services.

The process of evaluation involved the authors describing and explaining the specifications to small groups of Phase II participants. The participants commented on such areas as

1. Appropriateness and wording of objectives;
2. IPO steps in the activities;
3. Timing and pacing;
4. Grouping;
5. Suggestions for improvement of content, method and resources.

The results were collated and given to the authors of each manual for their consideration during revision and completion of the materials. The information received by the authors proved very valuable in the final revision of the two manuals and confirmed the usefulness of this simple evaluation procedure.
E. Simulated Field Trial of One Exemplar Manual

One of the four exemplar manuals developed in draft form during Phase I of the Workshop was subjected to a simulated field trial to:

1. Test if this evaluation technique was suitable for determining whether the exemplar manual would be of use in individual member countries;
2. Provide an efficient way of reviewing the strengths and weaknesses of manuals for the process of revision;
3. Assess if the principles of design would facilitate the development of resources and training of teachers in countries of the region.

The manual chosen was the second in the Family Life series entitled, IA.2 Extra Money for the Family.

The procedure used involved the participants playing the roles of learners attending a literacy session. The resource personnel formed a team to role-play the literacy teachers.

Three out of the five activities from the draft manual were presented. After completing the role play, participants answered a detailed questionnaire and were also asked to write general comments on how this type of training material might be useful in their particular countries.

The questionnaire asked for open-ended comments on the appropriateness of the objectives, suitability of the activities and methods, timing, pacing, grouping and the effectiveness of the IPO cycles. Participants also rated a list of comments on the training manual. These comments were expressed in the form of positive statements, which participants rated in terms of the amount of revision needed. The statements rated in this way are listed below:

1. The manual meets needs relevant to a literacy training curriculum.
2. The objectives are suitable and appropriate and are likely to satisfy the determined needs.
3. The general objectives are expressed in clear, unambiguous behavioural terms.
4. The objectives can be realistically achieved in the limited time (say six hours) available to participants.
5. The manual takes into account the literacy level previously attained by those for whom it is intended.
6. The learning activities are arranged in a logical sequence that holds together as a coherent whole.
7. All of the activities are practicable in all reasonable situations likely to be encountered by those using the manual.
8. All of the strategies chosen are appropriate for the objectives to be achieved.
9. The relationship between each activity and the media employed for that activity is appropriate.
10. The activities and groupings of participants are sufficiently varied to maintain the interest of adult learners.
11. The relative timing of the various activities is optimal. That is, the rate of change from activity to activity is practicable and paced so as to maintain maximum interest and involvement.
12. There is strong emphasis on activity and participation.
13. There is adequate emphasis on interactive group work.
14. There is adequate provision for giving participants feedback on the quality of their activities and products.
15. The programme is clearly based on linked chains of input-process-output cycles.
16. There is adequate provision to give reinforcement at key points throughout the programme.
17. There is provision for some on-the-spot evaluation of the effectiveness of the manual.
18. The organization and packaging of the manual is in the form of a self-contained unit that is reasonably portable in the sense that it can be easily stored, repeated or transferred from institution to institution.
19. There is provision for some reasonable follow-up.

The results of this simulation were also very positive. In the first place, many useful suggestions were received for improving the statements of objectives and the details of the learning activities. In the second place, the results suggested that the design principle and the modular concept of the curriculum plan would be acceptable in countries of Asia and the Pacific. The following points emerged in particular:

1. The IPO approach could make literacy training more “learner-centred”;
2. The systematic design would help in the training of literacy teachers by providing a clear training structure and learning sequence.

The results also indicated that this particular evaluation technique was useful and stimulating.

The simple methodology involved in this type of evaluation provided detailed feedback on the effectiveness and suitability of the exemplar manual. Therefore, the method would be useful for countries considering introducing the approach advocated by the APPEAL training materials. The method also provided detailed information on the strengths and weaknesses of particular aspects of the training material.
F. Field Trial of One Exemplar Manual

Of the four exemplar manuals developed in Phase I of the workshop, *Our Forests* (Curriculum Grid ID.3) was selected for field trial during Phase II in Nepal. The valuable cooperation of the Ministry of Education, Nepal, in conducting this field trial is gratefully acknowledged.

The aims of the trial were to:

1. Determine if the principles of design assist supervisors and trainers of trainers in their training role;
2. Evaluate how a trainer of trainers may communicate the design principles to literacy teachers to help them teach more systematically;
3. Evaluate whether the IPO design facilitates learning in actual field situations;
4. Evaluate how exemplar manuals could be adapted for training and teaching in the literacy training programmes of selected countries;
5. Develop guidelines for countries on transferring the principles of a literacy training curriculum and its materials into their own situation;
6. Improve the quality of the specific learning activities of the exemplar manual.

The village chosen for the field trial was at Lapsi Phedi, a hill community 20 kilometres north-east of Kathmandu accessible only by a steep walking trail, several kilometres in length. The population of the village was approximately 3,000 with an average-size family of 6.2. The literacy status of the community was 32 per cent. The main occupation was farming. Ethnic groups included Brahmin, Newar, Tamang, Chhetri and others.

The class chosen for the trial consisted of 20 individuals, 16 to 40 years of age with a male to female ratio of 60:40. The class had almost completed a basic literacy programme approximately equivalent to the end of Level I of the APPEAL exemplar curriculum.

The instructor had finished Grade 9 of formal education and had 12 days of non-formal education training. The resources used to conduct the trial included a facilitators’ guide, an illustrated booklet for the learners and thematic posters and games as suggested in the APPEAL exemplar manual, *Our Forests*. This manual is No. 12 in the series of 24 of the APPEAL literacy curriculum grid (Volume 1) and represents the final stage of Level I of that programme. The materials were translated into Nepali and except for a very few technical words, which were modified, the translation proceeded smoothly. The original spirit and intention of the exemplar manual remained intact. Visual aids proposed in the manual were readily produced with all labelling provided in Nepali. The learners’ materials were laid out as proposed in the exemplar manual. Figure 3.1 shows one page of the teacher’s guide of the Nepali edition.
The following steps were undertaken in conducting the field trial:

1. The Nepali edition of the exemplar manual was presented to a relevant group of six trainers, who were currently engaged in training facilitators (instructors) of literacy classes. Their reactions to the design and content as well as to the utility and practicality of the manual were noted;

2. A team of seven persons visited the field. The team consisted of one UNESCO consultant; one UNESCO resource person; the Chief of the Adult Education Section of the Ministry of Education, Nepal; three trainers; and one official observer from a relevant voluntary agency. One of the trainers then met with a group of ten local facilitators (instructors) and, using simulation methods, oriented them on the implementation and practical use of the manual. The other members of the evaluation team observed this process of orientation and recorded reactions and comments.

<table>
<thead>
<tr>
<th>Teacher’s Pages</th>
<th>Learner’s Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Teacher's Pages" /></td>
<td><img src="image2" alt="Learner's Page" /></td>
</tr>
</tbody>
</table>

Figure 3.1. One Page of the Teacher’s Guide of the Nepali Edition of the Manual, Our Forests, Used in the Field Trial
3. One facilitator (instructor) then used the manual in a literacy class in the village. This lesson was observed by the team and reactions of the learners were noted and recorded. After the lesson, members of the class were interviewed by the team.

4. The evaluation team analyzed the results of the trial and the UNESCO consultant prepared a report.

The results of this field trial gave those involved every confidence that the approach could be implemented in rural village settings. The principles of design were understood by the trainers and these design principles were communicated to the instructor, who appreciated the value of the approach in sequencing the lesson materials. After an instructor spent a few hours applying the IPO approach in actual lessons, the IPO design was seen by him to facilitate learning because it encouraged active participation and presented the learning events in an orderly but varied sequence. Learning was effective and the responses and reactions of the learners were very positive. Detailed comments on the activities also gave the authors helpful information for the production of the final edition of the manual.

At a more general level, the field trial showed that the exemplar manuals could provide useful guidelines for developing locally relevant training materials. It also confirmed that the design principles could be readily understood and translated into action by local literacy training supervisors. The senior administrator involved in the trial also appreciated the relevance of the IPO approach in other training situations.

The field trial highlighted the importance of involving all levels of decisionmakers in the implementation of the approach. The co-operation of senior management, supervisors, trainers of trainers and instructors can be obtained if the appropriate steps are taken to provide the necessary orientation and to involve everyone concerned in the decisions relevant to their levels of operation.

**G. Assessment of Possible Implementation**

At the conclusion of Phase II, sixteen participants were asked to state whether or not the design approach and the idea of a systematic training curriculum and resources would be useful in their countries. They were also asked to comment on the possibility of implementation. A summary of their replies is given below in Table 3.1.
<table>
<thead>
<tr>
<th>Country</th>
<th>Response</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>Yes</td>
<td>Content areas of the proposed literacy training curriculum of family life, economics and income, health and civic consciousness are already taught. The IPO approach will be helpful in improving our literacy training materials.</td>
</tr>
<tr>
<td>Australia</td>
<td>Yes</td>
<td>Several Commonwealth and State Agencies will be informed of the new approach. The design principles will be helpful in the training of trainers.</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>Yes</td>
<td>May introduce the literacy training curriculum and utilize the design principles proposed. At present there is no literacy training curriculum as such in Bangladesh.</td>
</tr>
<tr>
<td>Bhutan</td>
<td>Yes</td>
<td>Some elements of the IPO approach are already in use, but a more systematic application would be of assistance in re-training teachers of the formal system for work in the non-formal sector. The approach will also be useful for re-orienting volunteer teachers.</td>
</tr>
<tr>
<td>China</td>
<td>Yes</td>
<td>Could be widely implemented both as a theory and as a model for both literacy and continuing education. It could be applied to cater for different target groups.</td>
</tr>
<tr>
<td>India</td>
<td>Yes</td>
<td>An attempt will be made to build the IPO approach into the existing literacy curriculum. Objectives would be modified to meet local conditions.</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Yes</td>
<td>Some components of the curriculum and materials design approach based on the systems model may be applied, especially the IPO approach to the design of manuals.</td>
</tr>
<tr>
<td>Iran</td>
<td>Yes</td>
<td>At present, a somewhat similar approach is already operative in Iran. It should be helpful in the application of our preliminary and supplementary literacy programmes and for the new phase to be introduced in 1988.</td>
</tr>
<tr>
<td>Laos</td>
<td>Yes</td>
<td>Agree with the approach and some aspects, such as the three levels of literacy skill already operative. A first step in further development would be to organize a national seminar and then to run writing workshops.</td>
</tr>
<tr>
<td>Maldives</td>
<td>Yes</td>
<td>The structure of the literacy training curriculum is helpful. In implementing such an overall approach, however, our national goals and the availability of resources would need to be considered. The format will be valuable for writing manuals.</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Yes</td>
<td>Several aspects such as the levels of literacy skill, the curriculum grid, the spiral structure of the curriculum and the principles of instructional design could have an immediate impact.</td>
</tr>
</tbody>
</table>
NEPAL: YES. Aspects of the scheme are already operative in Nepal and so the approach is compatible with present procedures. The curriculum and manual approach would greatly help to systematize the somewhat unsystematic approach we have at present.

PAKISTAN: YES. We have a range of literacy materials already in place and this system could help utilize these. The report will be submitted to the Literacy and Mass Education Commission of the Ministry of Education.

PHILIPPINES: YES. The curriculum proposed may be adopted by various literacy training programmes and especially by the Bureau of Non-Formal Education (NBFE) of the Department of Education, Culture and Sports.

THAILAND: YES. The non-formal education system already uses this approach. Within literacy training, we would organize a national workshop for developing training materials and also train staff for programme arrangements.

VIET NAM: YES. We will redesign our literacy programme along the lines proposed. National workshops will be organized, materials designed and teachers trained. The new curriculum will be monitored and evaluated.

H. Conclusion

The evaluation procedures applied and the outcomes obtained during the early development stages of the APPEAL Literacy Training Materials have been reported in some detail for three reasons:

1. They help to establish the validity of the approach and to enhance its credibility for the Asia-Pacific region;
2. They describe a range of approaches for evaluating locally produced literacy training curricula and materials in member countries;
3. They suggest that those member countries wishing to do so could implement the approach with a minimum of difficulty.

Finally, the information in this Chapter refers only to techniques and approaches suitable for formative evaluation during early stages in the development of a national literacy training curriculum and its resource materials. More systematic approaches to the overall evaluation of a national literacy training programme are described and discussed in Volume 11.