

Policy

Planning

Management

Evaluation

APPEAL Manual for Planning and Management of Literacy and Continuing Education (AMPM)

Volume IV

**MONITORING AND EVALUATION
OF LITERACY AND
CONTINUING EDUCATION**



UNESCO PRINCIPAL REGIONAL OFFICE FOR ASIA AND THE PACIFIC, BANGKOK

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APPEAL
Manual for Planning
and Management of Literacy
and Continuing Education
(AMPM)

Volume IV

MONITORING AND EVALUATION
OF LITERACY AND
CONTINUING EDUCATION



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PREFACE

The Asia and Pacific Region still have more than seventy-five per cent of the world's illiterate population. Even though high rates of illiteracy are a serious problem mainly in the South Asian countries, certain other countries such as China, Indonesia and Papua New Guinea continue to have a substantial number of illiterates in absolute terms. Furthermore, some countries which had earlier claimed to have achieved more than 80 per cent literacy rates have been, on reexamination, finding that many among these literate people are not yet functionally literate. Thus the provision of basic literacy skills through formal as well as nonformal means continues to be a major concern for several countries of the Region.

Moreover, many people in the developing countries of the Region do not acquire adequate levels of mastery in basic learning skills during their primary schooling and most of those who graduate from primary schools do not continue their education. These people need different types of learning opportunities in order that they retain and improve their basic learning skills, and can continue to acquire new sets of knowledge and skills on a life-long basis. Thus, organization of continuing education programmes of various types in a need-based fashion has become equally essential for the development of human resources in these countries.

Although the importance of literacy and continuing education has been well recognized in many countries in Asia and the Pacific, the implementation of programmes has been considerably hampered due to the absence of systematic arrangements of planning and management in these areas. It is often realized that planning and management of literacy and continuing education demands new perspectives in terms of knowledge and skills for systematizing the processes of planning and management of these sectors. However,

professionals concerned with educational planning and management have been mainly preoccupied with formal education systems only. It is with a view to bridging this gap and offering a set of resource material for planners and administrators of literacy and continuing education programmes that this manual has been prepared by UNESCO PROAP with the active participation of planners and managers of literacy and continuing education programmes in the Member States of UNESCO in the Region.

Firstly, UNESCO Principal Regional Office for Asia and the Pacific (PROAP) organized a Sub-Regional Workshop on Planning Strategies for Literacy and Non-formal Education, on 3-10 September 1990 in Quezon City, the Philippines, and developed the draft APPEAL Manual for Planning and Management of Literacy and Continuing Education (AMPM). The draft was then revised and improved by the Expert Meeting held in Thailand, on 15-19 April 1991. The manual has attempted to combine theory and practice of Planning and Management of Literacy and Continuing Education in the Asia and Pacific Region. Since this manual is the outcome of the concerted efforts of a large number of field functionaries as well as experts in literacy and continuing education in the Region, UNESCO would like to express its heartfelt thanks to all of them for their valuable contributions.

The manual consists of four volumes:

- Volume I : Policy Framework for Literacy and Continuing Education
- Volume II : Planning for Literacy and Continuing Education
- Volume III : Management of Literacy and Continuing Education
- Volume IV : Monitoring and Evaluation of Literacy and Continuing Education

Contents of each volume have been presented in the form of several Units dealing with the different dimensions involved. The main focus of all the Volumes is planning and management of literacy and continuing education at the National level. However, the contents of several Units are equally applicable and useful to those engaged in literacy and continuing education activities at sub-national and local levels as well. Nevertheless, it should be remembered that the contents of the Manual are somewhat broad and generic as the concern has been to make it generally relevant to all the countries of the region. It is expected that practitioners in different countries would adapt the manual with suitable modifications in order to make it more country-specific and locally relevant.

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Introduction

Success of any action-oriented programme depends on the extent to which actions are guided by objective information regarding the field-level realities.

This is true of literacy and continuing education programmes as well. The need for an effective system of information generation and feedback is particularly heightened in the case of literacy and continuing education due to the complexity of the programme in terms of the target groups to be reached, the relatively loose organizational network for implementation and the continuously changing curricular inputs demanded by the continuing education programmes. In other words, the creation of an effective mechanism for information collection, processing and usage in implementation is necessary to ensure that the programme is progressing satisfactorily in terms of its inputs as well as time targets. This would, in turn, facilitate applying mid-course corrections to the implementation process, if necessary. An effective system of information flow and usage will act as an auto-regulatory feedback mechanism built into the programme to ensure the achievement of both quantitative and qualitative targets of literacy and continuing education programmes.

Specifically, creation of a good information base for literacy and continuing education can serve two important purposes. One purpose is to *monitor* the efficiency and effectiveness with which the pre-planned activities are being implemented. The other is to *evaluate* the total programme of literacy and continuing education including the programme objectives keeping in view the policy directives and the changing demands of the community. However, monitoring and evaluation processes should not be seen as actions outside the overall programme framework. Rather they should form an integral part of the programme planning and management process. The purpose of monitoring and evaluation is not just to find faults in the programmes but to generate actions which help improve them.

Several important points need to be borne in mind in designing and implementing an effective monitoring and evaluation system for literacy and continuing education. Some of the relevant questions are:

- What types of information are to be collected for monitoring literacy and continuing education programmes and at what intervals should they be collected?
- What are the specific programme parameters on which concrete information needs to be collected on a regular basis?
- What instruments can we use to collect the necessary information and from what sources are they to be obtained?
- What is the role of evaluation in improving the effectiveness of literacy and continuing education programmes?
- Who will carry out the evaluation processes and when will it be done?
- What kind of information flow and usage network is to be created for making the monitoring and evaluation system effective?
- What will be the role of different government and non-government agencies and organizations in the process of monitoring and evaluation?

It is essential that every planner and manager of literacy and continuing education operating at macro as well as micro levels find suitable answers to these kinds of questions. Even though the answers would vary considerably from one country to another, an attempt is made in this Volume of the Manual to find certain broad principles that should guide them in this regard. The first Unit in this Volume deals with questions related to monitoring the process of literacy and continuing education programmes. The second Unit is concerned with the principles and practices to be adopted for organizing an effective system of evaluation for literacy and continuing education. The third Unit outlines the nature of an information system for literacy and continuing education that is appropriate for making the processes of monitoring and evaluation effective.

Unit I

MONITORING

1. Major Tasks of Monitoring
2. Features of a Good Monitoring System
3. Data Collection Mechanisms in Monitoring

Monitoring

Monitoring is a system of documenting all planned efforts, processing the raw empirical data from the field on the implementation process and disseminating the analytical information to higher authorities, planners and implementors as well as community members. Policy making and planning requires factual information on how well or how badly the planned programme is being implemented for improving policy-making and planning processes as well as the management practices adopted by the implementing party. But the flow of information is not a one-way process. Decisions taken at the higher levels and the revisions made in the plans and management approaches need to be passed on to the implementation mechanisms operating at the field level as well. Monitoring in the context of literacy and continuing education essentially involves the creation of an effective communication process among the planners, administrators and those who actually implement the programmes at the field level.

Specifically with reference to literacy and continuing education programmes the monitoring process which provides for assessing programme accountability needs to cover certain essential questions:

- Are learning experiences provided to those people for whom the programme has been specifically designed?
- Are the programme activities including learning centres being organized according to the pre-specified norms and pre-planned schedule?
- Are the programme activities making the desired impact on the learners and the community?
- Are funds being used for the designated purposes and within the limits set by the budget?

Answers to these questions based on empirical reality are essential if the implement agencies are to optimize the efforts and resources committed to a particular programme.

1. Major Tasks of Monitoring

The task of monitoring is similar to that of carrying out formative evaluation as both the tasks involve collecting information which could be used to improve a programme as it develops. While a programme is being implemented, activities are undertaken which would provide information necessary to adjust the programme to the operational setting and to further improve it in terms of its efficiency and effectiveness in achieving the preset goals. The major aim of these activities is, therefore, to ensure that the programme is being implemented as effectively as possible. On the whole, the task of designing a system of monitoring for literacy and continuing education has to focus on the following four aspects:

- a) To determine, along with programme planners and staff, what sort of information about the programme will be collected and shared, and what decisions will be made based on this information;
- b) To ensure that the programme's goals and objectives, and the major characteristics of its implementation, have been well thought out and carefully recorded;
- c) To collect data at programme sites about what the programme looks like in operation and about the programme's effects on attitudes and achievements of the learners;
- d) To report this information clearly and to help the staff plan related to programme modifications.

Monitoring is essentially a part within the overall implementation framework involving these four clearly defined tasks. The steps involved in conducting the whole monitoring process can be seen as shown in Diagram 1.1. While the diagram indicates the broad framework for monitoring, decisions on the specific data to be collected and the way they have to be utilized depends on the nature of the programme being monitored.

While the literacy programmes would demand the collection and processing of certain standard sets of data, it would be more relevant to collect different sets of data for continuing education courses. Further, not all data on the programme implementation process needs to be quantitative in nature. For instance, one has to systematically and regularly collect

information on the efficacy of the actual curricular transaction processes taking place in the literacy and continuing education classes. Such data obviously will have to be qualitative in nature. Also, all monitoring does not necessarily involve reporting to the higher authorities about the state of affairs at the field level. It often involves use of reliable information and directly initiating corrective actions in the programme implementation framework without reporting to the higher authorities. In this context, it should be helpful to examine the exemplar checklist for monitoring a literacy programme as given in Table 1.1.

Diagram 1.1 Steps in Programme Monitoring

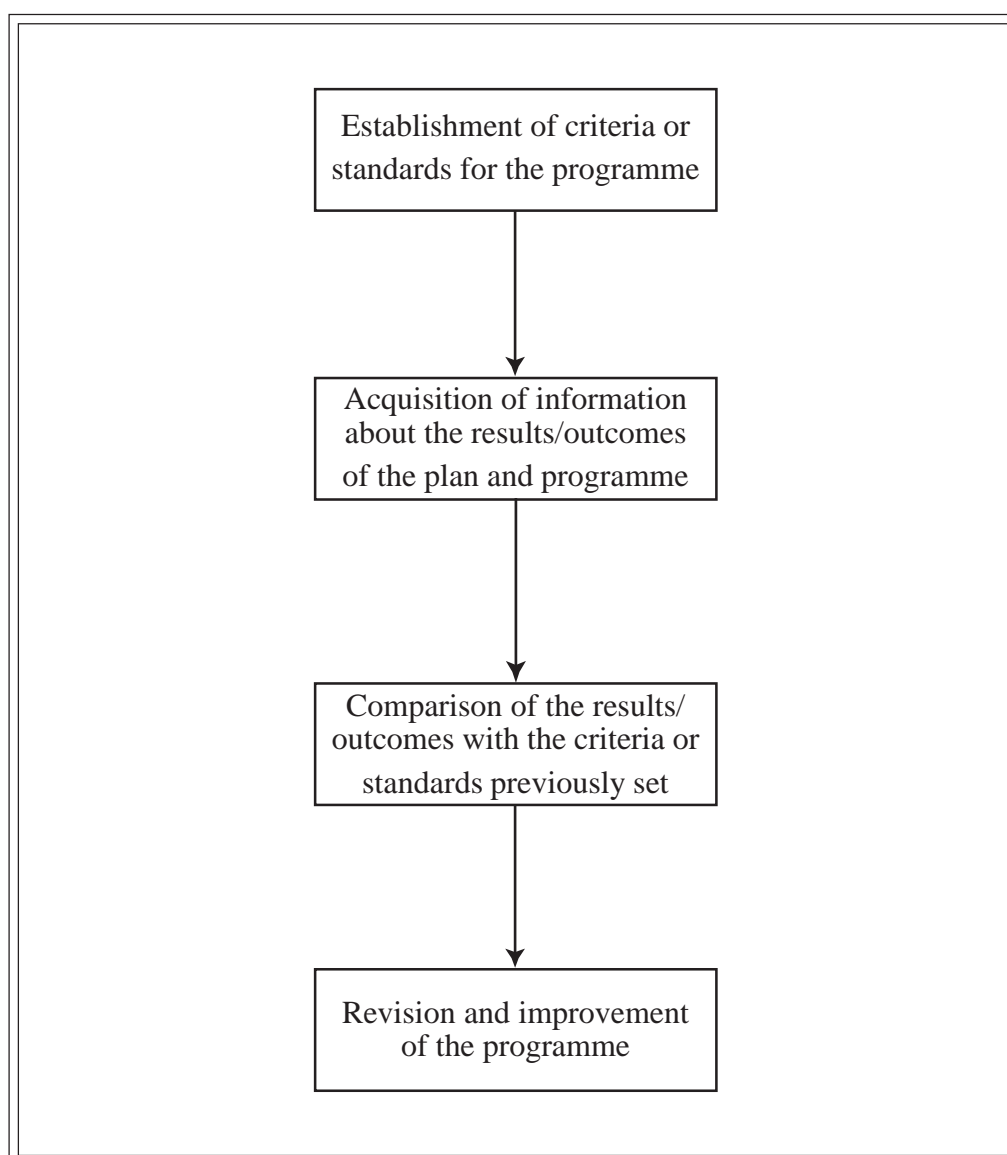


Table 1.1 Exemplar Checklist for Monitoring a Literacy Programme

Selected areas for monitoring	Criteria
<p>Input Curriculum</p> <p>Teachers</p> <p>Teaching/Learning Media</p>	<p>Is the content relevant to the lives, work and occupation of the learners?</p> <p>Is it integrative in nature?</p> <p>Are the specified goals and objectives attainable?</p> <p>Are the teachers qualified?</p> <p>Is it suitable in terms of content, learners' age group and local relevance? Are these made available to all learners at the appropriate time?</p>
<p>Process Integrate teaching/learning with respect to content and learning activities, e.g., the learner identifies a problem; discusses solutions to the problem; studies new vocabulary; links new vocabulary to arithmetic problems.</p>	<p>Are classes conducted according to the planned procedures?</p>
<p>Output End result aimed at human development, e.g., quality of life, working conditions and occupation.</p> <p>Impact on learners</p> <p>Impact on society</p>	<p>Number of people achieving the goals of learning; has their quality of life improved? How and in what ways?</p> <p>Have they developed better occupational skills?</p> <p>Have changes occurred in the community as a whole? In what respects have they occurred?</p>

2. Features of a Good Monitoring System

A good monitoring system should:

- a) provide periodic and timely feedback of financial and physical data to measure the progress of a programme;
- b) identify problems which require solutions. Problems may be peculiar to the programme or they may be institutional problems which require changes in existing rules and regulations;
- c) be relatively simple and should not burden the monitors, but comprehensive enough to incorporate the basic information required by management. The use of many forms requiring a mass of data not only creates confusion but also dampens enthusiasm in participating in the monitoring process.

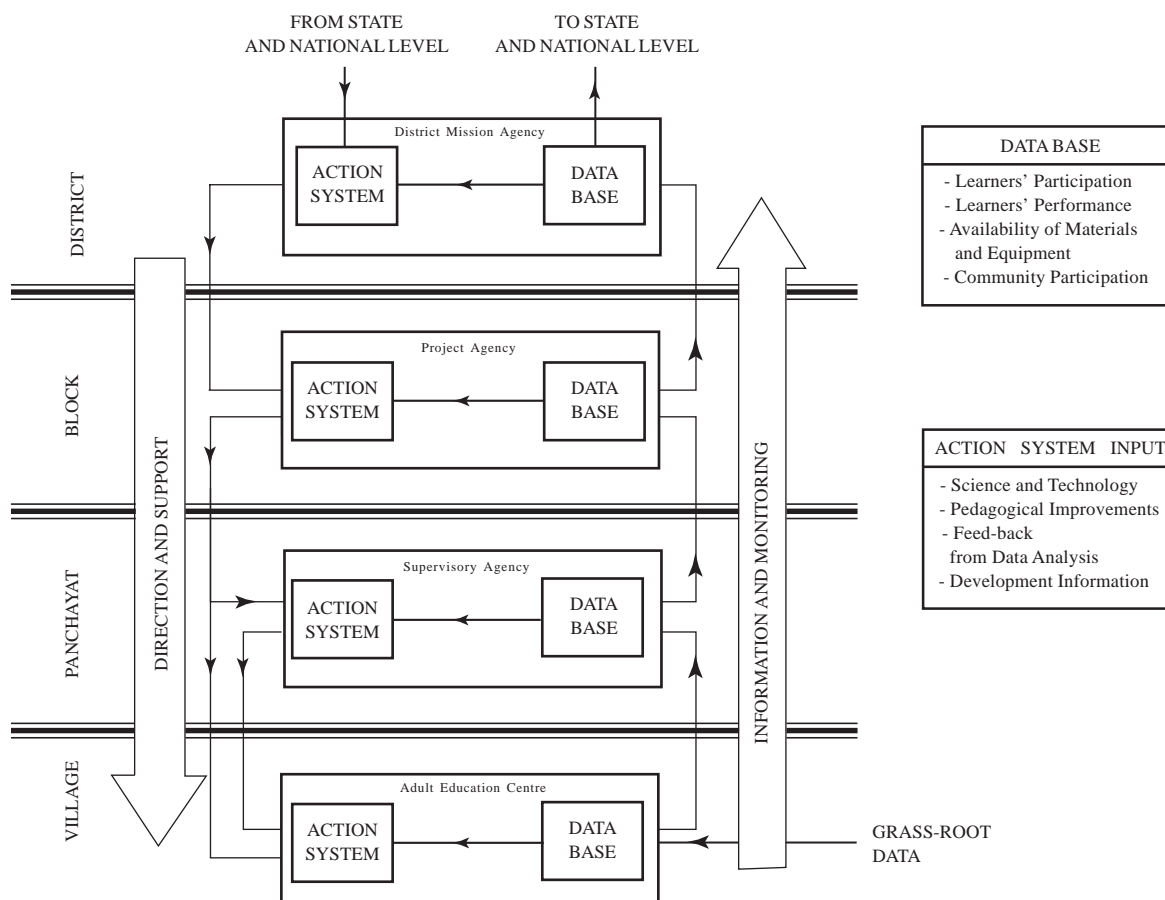
Monitoring is needed at various points of the programme cycle from the setting of goals to the performance of activities generated to achieve them. Monitoring is concerned with progress. It is therefore a continuous exercise, concurrent and coterminous with the programme implementation. It seeks to compare what actually happens with what has been planned or expected. The main feature of a good monitoring system is the effective interface it builds up between the action system and the information base generated at the field level. It would ensure that continuous feedback is provided on the field setting to incorporate timely correction. As noted earlier, the feedback mechanism is not only meant for the higher authorities but should form an effective cycle even within the field-level implementing organs. Diagram 1.2 effectively illustrates the nature of such an information feedback system for adult education programmes.

3. Data Collection Mechanisms in Monitoring

Data gathering instruments for monitoring, generally used by the countries where literacy and continuing education programmes are in progress, include the following:

- a) Record-keeping: learners' attendance register, instructors' and supervisors' diary, data sheets/cards.

Diagram 1.2



Source: *National Literacy Mission*, Government of India, New Delhi, 1988

b) Flow of information - bottom up: periodic returns, visits, meetings between functionaries of different levels, training and evaluation sessions, etc.

c) Flow of information - top down: instructions, circulars, training programmes, inter-agency meetings, seminars, media releases, etc.

Informal discussions, interviews, visits, observations, meetings, seminars, mass media, etc. may be broadly categorized as informal instruments. The formal instruments of monitoring which are widely used include the following:

- a) Survey schedule;
- b) Instructor's diary and/or attendance register of learners;
- c) Instructor's initial report to the supervisor;
- d) Instructor's periodic returns;

- e) Instructor's final return, highlighting the outcome of a course;
- f) Supervisor's diary containing observations and notes recorded by him/her during his/her visits to the literacy and continuing education centres and also comments on the returns received from the instructors;
- g) Supervisor's periodic report to the district office;
- h) Supervisor's data register;
- i) District officer's periodic returns to the provincial office;
- j) District officer's data register;
- k) Provincial officer's returns to the national headquarters;
- l) Provincial officer's data register;
- m) National level register; and
- n) Annual report on the programme.

Data collected in the form of periodic monitoring returns at different levels may have the following features.

a) Data at the instructor's level

The instructor's initial, mid-term and final returns illustrate the transfer of data from the primary document to the periodic returns. All the entries in the returns would be made by the instructor based on the attendance records.

b) Supervisor's data register and quarterly return

The monitoring of returns sent by the instructor to the supervisor may be compiled in a data register. The supervisor's quarterly or other periodic returns to the district office may be prepared by taking the data register maintained as the reference material.

c) District official's return

The district official while summing up the returns from the supervisors should be able to detect any imbalances in implementation of the programme. It is expected that the district office would redesign the plan on the basis of the field situation as reflected in the returns from the supervisors. The district official is sometimes expected to collect relevant, simple and informative printed materials from the other agencies responsible for the programmes in the district. Such activities would also be reflected in the district official's return to the provincial level or the national level.

d) Provincial official's return

The quarterly returns from the provincial office to the national office, while indicating the number of classes, learners enrolled and learners graduated, may also include the cumulative figures if considered necessary. The provincial level official's returns to the national level should also indicate the strength of the administrative structure designed for the implementation of a programme.

e) National data register

National headquarters generally maintain national data registers and report annually to higher levels in the government about the progress of a programme and also prepare materials for the media. It is necessary to prepare an objective and balanced interpretation of the performance of the concerned implementing agencies, to emphasize the strong points, and also suggest concrete steps for overcoming weaknesses in programme implementation.

As all decisions emerging from the monitoring system should have a positive impact on the operational efficiency and performance of the implementing agencies, the influence of monitoring in improving the performance of the implementing agencies and the quality of the programme can also be monitored.

Unit II

EVALUATION

1. What should be Evaluated?
2. Stages of Evaluation
3. Who are the Evaluators?
4. Case Study 1: An Evaluation of the Development and
Implementation of a Functional Literacy
Curriculum
5. Case Study 2: An Evaluation of a Continuing Education
Programme Related to Dysentery Control

Evaluation

Evaluation has a variety of connotations in educational literature. The term is often used to refer to learner evaluation which focuses on measuring the learning outcomes achieved as a result of specific learning experiences. Another meaning refers to an assessment of the inputs and processes that go into making up specific educational programmes. This may include evaluation of the teaching-learning process, learning material and so on. A third meaning attached to the term is the comprehensive assessment of specific programmes in terms of their efficiency and effectiveness after taking all the component factors into consideration. This is also referred to as 'Programme Evaluation'. In this Unit, the term evaluation has been used to refer to this system of 'Programme Evaluation'.

Programme evaluation is a means by which useful information about a programme can be collected and analyzed to produce a reliable data base upon which decisions on the programme can be made. Being a comprehensive endeavour to appraise the total programme, it takes into consideration a variety of inputs, processes as well as product variables related to the programme. Needless to say, the planners and administrators of literacy and continuing education will have to make critical choices based on such reliable information. The tasks would involve not merely assessing the operation but also examining the assumptions and objectives of the programme itself. This becomes very crucial in the case of literacy and continuing education programmes which have to keep track of the changing demands of the community and national priorities and be open to readjustment.

Programme evaluation essentially consists of the following phases which are interrelated in a cyclical fashion.

1. Formulation or reformulation of the educational policies, plan, programme, project and budget.
2. Defining and determination of the evaluation purpose.

3. Choice of indicators, selection of evaluation criteria and identifying the evaluation data requirements.
4. Selection of evaluation design and preparation of instruments.
5. Development of data collection procedures and selection of data analysis techniques.
6. Measurement and data analysis.
7. Reporting and recommendation.
8. Decision-making.

1. What should be Evaluated?

The specific focus of an evaluation depends on the particular purpose for which the evaluation data is being collected. It may be necessary to examine the whole context and conditions in which the programme is operating, if the purpose is to make major decisions related to policy and planning. Sometimes the purpose of programme evaluation may be limited to assessing the implementation effectiveness of various programme components without questioning the basic assumptions or objectives of the programme. In this case, the focus of evaluation also will be limited to certain process dimensions.

With respect to literacy and continuing education programmes, the focus and contents of evaluation can be classified under four categories, namely, context, input, process and product. Each category seems to have a direct relationship with the kind of decisions they facilitate as indicated below:

Type of evaluation		Type of decision served
Context Evaluation	---	Planning Decision
Input Evaluation	---	Structuring Decision
Process Evaluation	---	Implementing Decision
Product Evaluation	---	Re-planning Decision

Context Evaluation

This is the most basic type of evaluation. It has the following functions:

- a) Serves in the determination of objectives.
- b) Describes the boundaries of the system to be evaluated.
- c) Defines its relevant environment.
- d) Delineates the actual and the desired conditions.
- e) Identifies unmet needs and unused opportunities.
- f) Diagnoses and analyses problems.

- g) Monitors the system to maintain a current baseline of information and provides a basis for widespread communication and control.
- h) Looks for emerging value orientations.

Input Evaluation

The purpose of this type of evaluation is to provide information for determining how to use resources to meet programme goals through identifying and assessing the following:

- a) relevant capabilities of the responsible agency
- b) strategies for achieving goals
- c) designs for implementing selected strategies

It also provides information on whether outside assistance is required, how should the objectives be stated in operational terms, what strategy should be adopted for achieving the objectives and what operational plan should be employed to implement that strategy.

Process Evaluation

Once implementation has started, this type of evaluation provides feedback for the following variables:

- a) *Objectives*
 - i. To detect or predict defects in the procedural design or in its implementation.
 - ii. To provide information for programmed decisions.
 - iii. To maintain a record of the procedure as it occurs.
- b) *Strategies*
 - i. Identifying and monitoring continually the potential sources of failure in a programme.
 - ii. Projecting and servicing programmed decisions to be made by programme managers during the implementation of a programme.

- iii. Notifying the main feature of the project design and describing what is actually taking place.

It is essential to have continuous feedback about the functioning of various programme components so that process evaluation can perform a vital function in improving the efficiency and effectiveness of programme implementation. Information is delineated, obtained, and reported as often as required - daily, if necessary - especially during the early stages of a programme.

Product Evaluation

The purpose of product evaluation is to measure and interpret attainments not only at the end of a programme cycle, but as often as necessary during the programme term.

The specific focus of product evaluation in literacy and continuing education programmes can be on certain quantitative and qualitative factors such as:

- number of those successfully completing literacy cycles.
- number of those taking up different post literacy and continuing education courses.
- reduced drop-out rates.
- meeting unit cost targets in implementing the total programme.
- number of literacy and continuing education functionaries trained.
- development and production of literacy and continuing education learning material.
- improvement in the quality of life of the people who have undergone various courses.
- improvement in the vocational skills and earning capacity of the learners.

2. Stages of Evaluation

In an evaluation, comparisons are made between the planning framework and the implementation process of a programme. To ensure a high correlation between planning and programme implementation, four stages of evaluation are needed:

- a) before the commencement of the programme;
- b) during the implementation of the programme;
- c) at the completion of the programme;
- d) some years after completion when the activity is expected to have reached its full development and the full impact of the programme is expected to have been realized.

The focus of an evaluation carried out before the implementation of a programme is essentially diagnostic to assess the educational needs and potentials of the target group, test programme hypothesis or determine the feasibility of a planned programme. Cost-benefit analysis is usually carried out at this stage. The concern is to make a critical appraisal of the relevance, feasibility and potential of the programme before a decision is made to undertake that programme, or to approve assistance for it.

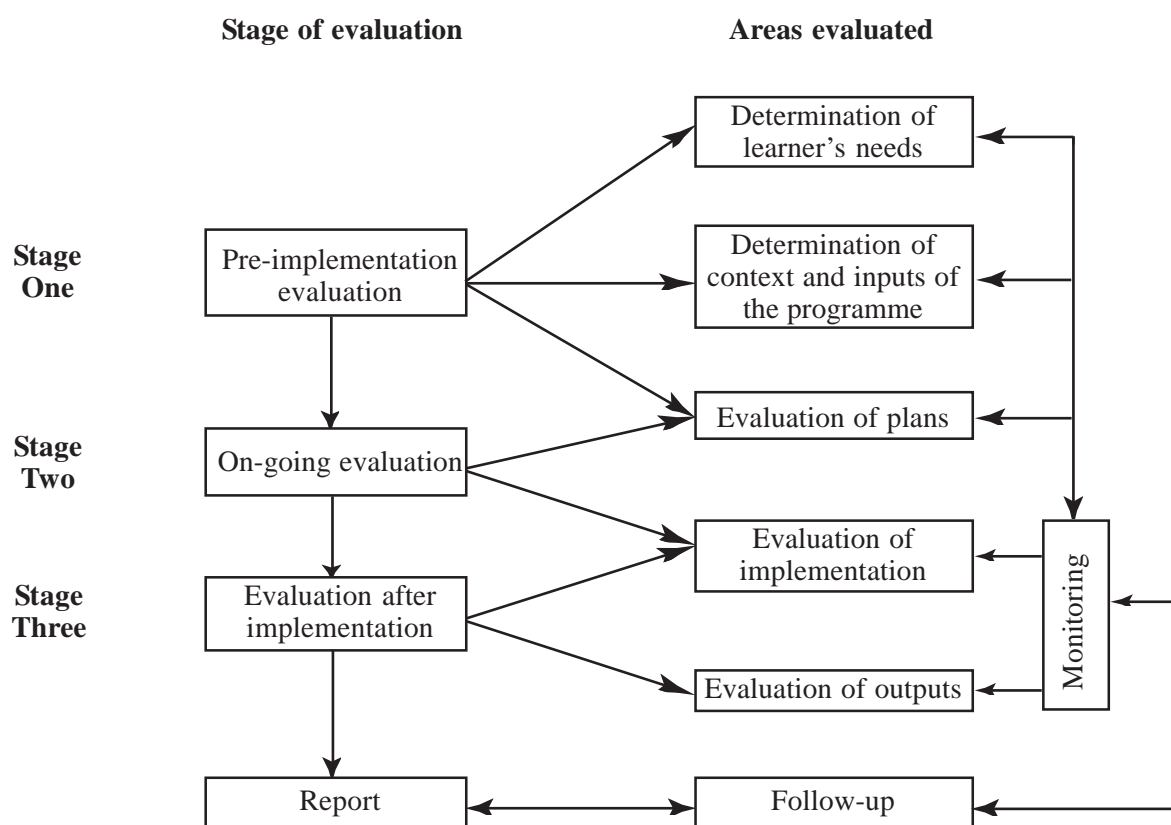
On-going evaluation refers to analysis and appraisal carried out during the implementation phase of a programme. This is concerned with examining its continuing relevance, efficiency and effectiveness and also its present and likely future outputs, effects and impact. The purpose of on-going evaluation is two fold: (1) flexible adaptation of the programme to changes either in its environment or in the overall goals and (2) early detection of programme deficiencies and immediate design of intervention strategies. On-going evaluation examines whether the assumptions or hypotheses made during the programme formulation/appraisal stage are still valid, or whether adjustments are required to ensure that the overall programme objectives will be achieved. For instance, in a literacy programme, this would highlight the relevance and effectiveness of the teaching-learning material being used or the techniques of curricular transaction adopted by the instructors and may suggest modifications. The implication could also be for the way instructors are being trained or for

the physical infrastructure being provided in the literacy centres. The third stage of evaluation generally referred to as summative or terminal evaluation focuses on identifying the extent to which programme objectives have been achieved at the end of the total programme cycle. This would help assess the overall programme's effectiveness measured in terms of the outputs of the programme and the impacts they are likely to have.

Sometimes, it may be relevant to carry out an evaluation at a stage long after the full implementation of the programme cycle to examine the impact the programme has made, in general, and the sustenance of the learning outcomes and their effective utilization on the part of the learners, in particular. Evaluation of this type is also referred to as Ex-post evaluation as it is taken up at a stage when the benefits and impact of the programme are expected to have been realized. Both terminal and ex-post evaluations aim to obtain information on (1) the effectiveness of the programme in achieving its stated objectives, (2) its contribution to the achievement of sectoral or national planning targets and goals, and (3) the self-sustaining character of the changes resulting from the programme. The contribution of the programme to the results has to be isolated to as much as possible. An attempt to establish a possible causal relationship between the programme inputs and the final results is the main aim of evaluation at this stage.

It should be mentioned that evaluation of literacy and continuing education programme at these different stages should not be seen as mutually independent and unrelated. The inter-relationships between them and their specific concern for evaluation of different aspects are summarized in Diagram 2.1.

Diagram 2.1 Relationship between Stages of Evaluation and the Evaluated Areas



3. Who are the Evaluators?

While in many instances evaluators or evaluation teams have been people external to the particular programme or institution, it is now considered important that in any evaluation process the emphasis should be participation. This is particularly relevant in the case of programmes in the field of literacy and continuing education. Hence, while external experts may still be called upon to provide the benefit of their skills and, at times, their objectivity, the decision to involve such people will come about as a conscious decision on the part of the members of the programme being evaluated.

Both approaches have advantages and disadvantages. The major advantage of external evaluation is greater objectivity, while the major advantage of internal evaluation is that it

may provide greater scope for accepting the findings of evaluation and implementing the recommendations. Particularly in the context of literacy and continuing education programmes, external evaluations have come in for considerable criticism in many countries. It is observed that often external evaluators adopt yardsticks for assessment which are totally inappropriate and which therefore lead to unreliable findings. However, it should be noted that one cannot do away with either kind of evaluation. Specially for literacy and continuing education programmes, which seem to suffer from low public credibility in many countries, disbanding external evaluation altogether may more hurt their prospects than help. What is more appropriate is to search for newer paradigms of evaluation which provide for participation of external experts as well as internal members of the implementation team in a joint fashion.

Participatory Evaluation. Literacy and Continuing Education is a mass programme concerned with youths and adults, who are learners and at the same time, participants in a number of developmental activities in their communities. Any programme evaluation in literacy and continuing education cannot be conducted without soliciting participation of the people who are the beneficiaries of the programmes.

Literacy and Continuing Education is also multi-disciplinary and multi-sectoral programme in which different developmental agencies, Non-Governmental Organizations (NGOs), community leaders, etc. are involved. Therefore, these members also have to be involved in the evaluation of literacy and continuing education.

Participatory evaluation has three functions. The first is to satisfy the book-keeping requirements of the governing bodies and, particularly, of the funding bodies. The second is the improvement of the quality of programme planning and management decisions relating to the technical aspects of the programme. If the evaluation is conducted on a fully participatory basis, there is the third function which is as important as the other two and most relevant to literacy and continuing education programmes. Participatory evaluation has a formative educational process function : by involving people in a situation where inter-personal communication is essential, it heightens the awareness of each of the cooperating partners about the true nature of the problems they are trying collectively to solve.

4. Case Study 1 : An Evaluation of the Development and Implementation of a Functional Literacy Curriculum

The Northern Regional Non-formal Education Centre in Thailand proposed a project entitled, *The Development of Northern Functional Literacy Curriculum and Implementation*. The project's objectives are to:

- a) Revise the earlier functional literacy curriculum and learning materials;
- b) Train regional and provincial non-formal-education personnel in curriculum development and project management;
- c) Improve training models, strategies and training manuals for volunteer teachers and related personnel;
- d) Create a working network between the regional and provincial non-formal education centres.

An evaluation design has been proposed to measure and interpret the Project's attainments in relation to its goals, as well as to determine the strengths and weaknesses of the Project's procedural design and implementation. Table 2.1 presents the proposed design in a tabular format.

5. Case Study 2 : An Evaluation of a Continuing Education Programme Related to Dysentery Control

This is a theoretical educational programme to assist in the control of dysentery in young children.

Target group. Parents of young children in villages where the mortality rate from dysentery is high.

Objectives. The families at risk who have taken part in the programme will:

- a) Understand the cause of dysentery and how it is spread;
- b) Understand the ways of reducing the risk of contracting dysentery;
- c) Be competent in administering the appropriate medical treatment;

- d) Be committed to the reduction of risk factors in the home and community;
- e) Be committed to administering treatment when appropriate.

Evaluation. In terms of the established objectives, a possible set of evaluation techniques may include:

- a) Recording the number of participants.
- b) Asking the participants at the follow-up session how many have implemented the procedures already.
- c) Visiting a sample of participants six months after the programme is completed to measure the extent of implementation.
- d) Measuring the child mortality rate in the target area before and after the programme.

Table 2.1 Evaluation Procedures and Timeframe for the Development of Northern Functional Literacy Curriculum and Evaluation Project				
Programme Objectives	What is Evaluated	Evaluation Objectives	Evaluation Methods	Time Required
To evaluate the models and strategies in the development and management of the functional literacy curriculum and learning materials	CONTEXT			
	<ul style="list-style-type: none"> ● The relevant environment of the ongoing programme, i.e. ● The curriculum and learning materials and their performance; ● The effectiveness of the programme's management 	Assess to what extent the present curriculum and learning materials are congruent with today's social, cultural and economic changes Determine the effectiveness of the programme's management as well as problems occurring in its implementation	Document analysis (reports on research meetings, implementation and experts' interviews). Compare content presented in the materials with present conditions in the society	6 months
	INPUT			
	The inputs required in the development of the curriculum materials and the programme's implementation	Consider the objectives of the new programme in terms of its importance and responsiveness to the problems found in the context evaluation. Analyse the potential costs and benefits of one or more procedural designs and select the most suitable and feasible design	Document analysis Organization study (manpower resources, budget allocation, management system, etc.) Interviews with experts in programme planning and methodology, curriculum and material development Analyse possible alternatives and their costs	3-4 months

Table 2.1 Evaluation Procedure and Timeframe for the Development of Northern Functional Literacy Curriculum and Evaluation Project (cont'd)				
Programme Objectives	What is Evaluated	Evaluation Objective	Evaluation Methods	Time Required
	PROCESS			
	Programme implementation <ul style="list-style-type: none"> ● Activities ● Programme management 	Monitor the programme Assess the programme's activities in terms of its objectives, procedures and effectiveness Determine the strengths and weaknesses of the implementation and provide information for remedial decisions Note: Programme activities will include: Workshop to develop curriculum and materials Training of volunteer teachers	Interview/questionnaires (respondents are programme staff/administrators, teachers' trainers, volunteer teachers and other involved personnel) The interview should focus on: <ul style="list-style-type: none"> ● Expected processes ● Expected quality ● Actual processes and quality Compare the expected and actual outcomes Identify the gaps and problems and propose alternative solutions	12 months
	PRODUCT			
Periodically follow-up on the implementation of the curriculum	The programme's product The programme's achievements in the short-run The programme's achievements in the long-run	Determine the programme's success Evaluate learners' achievements and skills and assess the acquisition of desired behaviours according to the programme's objectives	Achievement tests Interviews Questionnaires Qualitative evaluation approaches Case studies	18 months Months 1 to 6-Short-run achievements evaluation Months 7 to 12-Long-run achievements evaluation End of month 18-impact evaluation
Determine the effectiveness of the curriculum, learning materials and the curriculum management Study the programme's impact on learners and their communities	The programme's impact	Assess the effectiveness of the programme during the implementation period and after the project is completed Determine the programme's impact on learners and their communities		

Unit III

REPORTING AND DISSEMINATION OF INFORMATION

1. Reporting on the Progress of Implementation
2. Creating an Information System for Literacy and Continuing Education
3. Issues in the Organization of Educational Information System

Reporting and Dissemination of Information

Effective planning and management of literacy and continuing education which involves a complex interplay of a number of physical and human variables depends greatly on the nature of the information base available to the planners and managers of the programmes. The tasks of planning and managing literacy and continuing education, whether the concern is at macro or micro level, by its very nature requires making choices of critical importance in an informed manner. This demands that the persons concerned have a quick and direct access to reliable information on a number of aspects related to literacy and continuing education.

Both monitoring and evaluation are tools for analyzing data and producing information for decision making. Reporting is the supply of monitoring and evaluation information to decision makers and community members. Efforts may be made to find effective methods for the dissemination of the results of programme implementation at the grassroots level. It is apparent that the network, at the national, district, and local levels, will have to find an effective mechanism for the dissemination of information on literacy and continuing education.

1. Reporting on the Progress of Implementation

The ultimate objective of monitoring and evaluation is to communicate relevant findings to the decision makers. This makes it essential to develop a system of documentation and reporting the observations on the programme components and their functioning to all concerned. Broadly two types of programme reporting are recognized. These are:

- a) **Interim reporting** which refers to reporting that is done while the programme is being implemented.
- b) **End-of-the-programme reporting** which refers to reporting that takes place at the end of the programme. Results of the programme are compared to programme objectives. Interim reports are particularly useful for providing feedback to the project staff to assist in refining a programme's operations. The reporting system is developed in such a manner that it has linkages back to the planning of the programme and forward to the control and evaluation stage of the programme.

Following are some of the points on reporting procedures which may enhance the utilization of monitoring and evaluation findings.

- a) Results should be made with reference to the framework relating to the definitions, indicators and hypotheses established in advance. This would help to avoid ambiguities and disagreements on what the programme is intended to do.
- b) Findings should be reported promptly to allow quick feedback of information for changes that may need to be made.
- c) Effectiveness of the programme's components should be emphasized in the assessment. Such detailed information on the programme process will clearly point out corrective measures that are needed and guide the decision-makers in selecting among alternatives for future action.

Systematic internal monitoring and evaluation carried out as a parallel activity will not only help implementation through constant feedback, but will also help in improving the planning and implementation at the field level. To facilitate close co-ordination among the organizations concerned, there needs to be an effective monitoring/evaluation and reporting system to provide information on the status of activities being conducted by different organizations.

2. Creating an Information System for Literacy and Continuing Education

Every country has some arrangements for reporting about literacy and continuing education programmes. Yet, there is a need to strengthen this aspect in a systematic manner to facilitate wider and more effective dissemination of information gained through programme implementation, and the exchange of experiences and expertise in literacy and continuing education. Sound decision-making for programme planning and management depends upon the availability of adequate information support which is timely and reliable.

The main objectives of creating an information base in the field of education are:

- a) to provide educational planners, administrators with reliable and timely data and information necessary for decision-making;
- b) to co-ordinate efforts in the acquisition, processing, storage, analysis, repackaging and dissemination of information;
- c) to strengthen the capability of the planner to manage, plan and control the flow of information among related agencies in various sectors;
- d) to facilitate and promote the use of relevant information by various agencies and individuals at all levels for more effective educational planning, implementation and management;

The first step in designing an information system must take into account the type of information required at different organizational levels, keeping in view

their purpose. The purpose of collecting information is to help planners and administrators to make decisions about educational programmes and to assist field administrators in programme implementation and evaluation.

The following table illustrates the type of information to be handled by an information system for literacy and continuing education.

**Selected List of Information to be handled by an Information System
for Literacy and Continuing Education**

1. Learners/participants/students
 - 1.1 *Population*
 - 1.1.1 Population by sex and by standard age-groups corresponding to various levels of education
 - 1.1.2 School absorption capacity
 - 1.1.3 Admission requirements (age)
 - 1.1.4 Birth rate
 - 1.1.5 Population by single years of age (or age-group) and by sex
 - 1.2 *Enrolment by level and programme for non-formal education*
 - 1.2.1 Enrolment by sex, grade and age
 - 1.2.2 Repeaters by grade and by sex
 - 1.2.3 Drop-outs by grade and by sex
 - 1.2.4 Graduates by sex
 - 1.2.5 Transition rate by sex
 - 1.2.6 Performance by grade and by sex
 - 1.2.7 Literacy level by age-group and by sex
 - 1.3 *Class organization*
 - 1.3.1 Number of class and class-size by grade

- 1.3.2 Classrooms and facilities
- 1.3.3 Teachers
- 1.3.4 Textbooks
- 1.3.5 Teaching material
- 2. Education personnel
 - 2.1 *Present staff*
 - 2.2 *Recruitment*
 - 2.3 *Staff development*
 - 2.3.1 Educational Staffing structure
 - 2.3.2 Professional profile
 - 2.3.3 Available competent teachers and other staff
 - 2.3.4 Training opportunities, facilities, materials and aids
- 3. Curriculum
 - 3.1 *Development*
 - 3.1.1 Curriculum development centres, committees and individuals
 - 3.1.2 Textbooks by type, level, grade and circulation
 - 3.1.3 Teaching aids, materials, guides and manuals by type and circulation
 - 3.1.4 Audio-visual materials by type and circulation
 - 3.2 *Implementation*
 - 3.2.1 Curricular organization by level
 - 3.2.2 Research/innovations/experimentation
 - 3.2.3 Implementation task forces and committees
 - 3.2.4 Co-curricular activities
 - 3.3 *Evaluation*

Monitoring and evaluation of literacy and continuing education

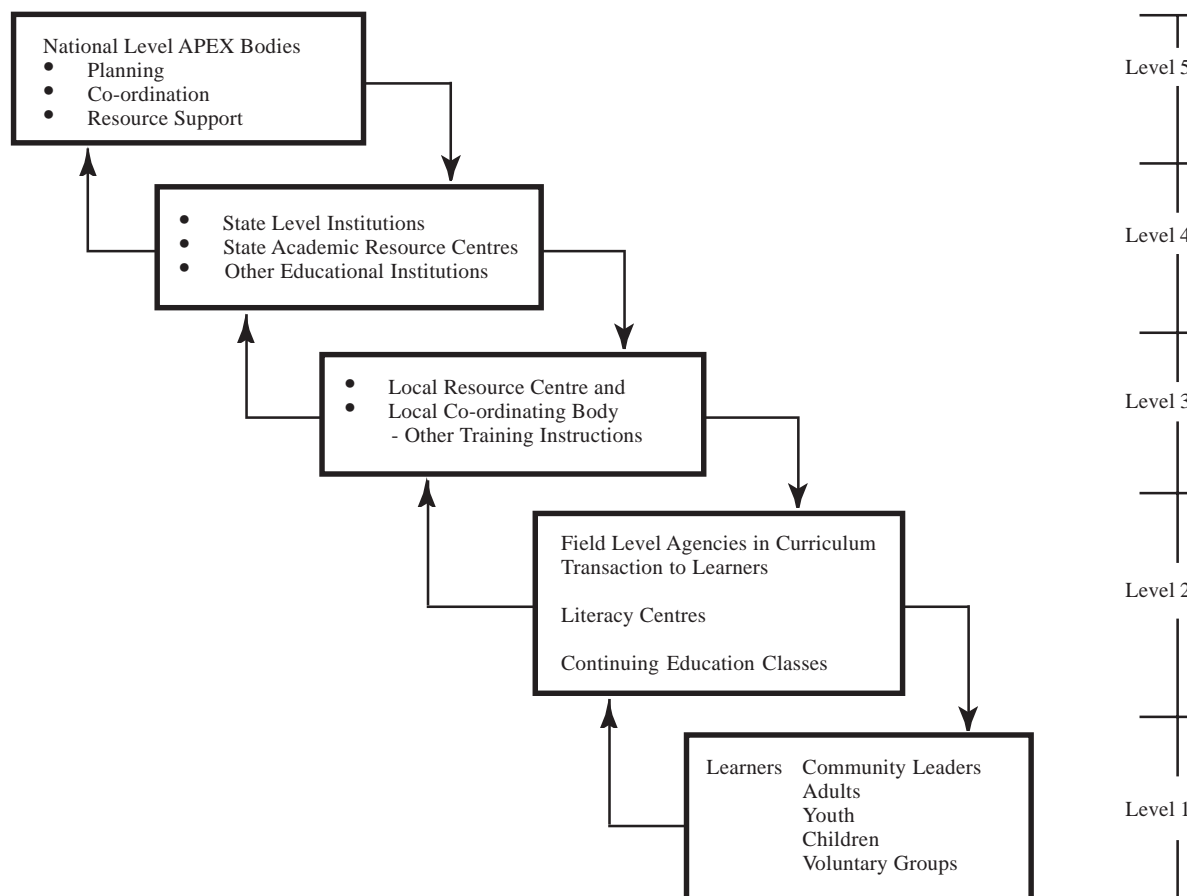
- 3.3.1 Diagnostic test
- 3.3.2 Inventory
- 3.3.3 Achievement test by subject area
- 3.3.4 Aptitude test
- 3.3.5 Attitude test
- 3.3.6 Mental ability and personality test
- 4. Non-formal education and community extension services
 - 4.1 *Non-formal education*
 - 4.1.1 Literacy and post-literacy programmes
 - 4.1.2 Adult education programmes
 - 4.1.3 Non-formal vocational/technical training courses
 - 4.1.4 Distance learning programmes
 - 4.1.5 Other non-formal education and training programmes
 - 4.2 *Other community extension services*
 - 4.2.1 Education-and-work programmes
 - 4.2.2 Research and industries/agriculture/services
 - 4.2.3 Population education
 - 4.2.4 Environmental education
 - 4.2.5 Sports
 - 4.2.6 Cultural activities
 - 4.2.7 Other community services
- 5. Physical facilities
 - 5.1 *Existing facilities*
 - 5.1.1 Buildings by type, area, permanence and condition
 - 5.1.2 Furniture by type, materials and condition
 - 5.1.3 Playground and school farm

- 5.1.4 Equipment-electricity, telephone, radio, television, tape recorder, duplicator, etc.
- 6. Finance
- 7. Legislation, organization and administration

The list given above illustrates the kind of information to be collected for purposes of monitoring and evaluation of literacy and continuing education programmes. Yet, one has to find answers to such questions as to what are the sources and modalities of creating such an information base; what institutional arrangements are required for this purpose; and what feedback channels are to be created for effective usage of the information base for improving the programmes of literacy and continuing education. It is not unusual to come across literacy and continuing education planners taking crucial decisions but without the necessary data from the field. But, one also finds that many a time useful information on the field level reality remains with the implementers while only some routine quantitative data is transmitted to decision makers. This highlights the need for creating interconnecting channels for information flow and feedback across different levels to optimize the usage of the information base created. The multi-organizational framework involved in implementing literacy and continuing education programmes makes the task even more complicated.

The need for literacy and continuing education arises essentially out of the problems perceived by the people themselves who are also the recipients of the programme inputs. Thus the basic source of information about literacy and continuing education consists of the learners who are actually the target groups for different kinds of programme components. Information originating at this level has to flow through various institutional and individual channels of the system providing necessary feedback at appropriate points. Diagram 3.1 gives the structure of such an arrangement indicating the channels of information flow and feedback.

Diagram 3.1 Channels of Information Flow and Feedback at Different Level



Source: Adopted from *Environmental Education Handbook for Educational Planners*, National Institute of Educational Planning and Administration, New Delhi, 1990.

3. Issues in the Organization of Educational Information System

An educational information system is an organized set-up for information and documentation services that collects, processes, stores, analyses and disseminates information for educational planning and management and renders aid in the use of such information. Critical issues in relation to the development of educational information systems and services may fall into the following categories: (1) co-ordination and management, (2) information acquisition, processing, dissemination, and utilization, (3) resources, (4) language, (5) quality, (6) computerization.

1. Co-ordination and Management

- a) Effective co-ordination among various government agencies and educational institutions to inquire into issues like standardization, coverage and accessibility of educational information, and to recommend ways to minimize inconsistency, duplication and incompatibility.
- b) Adequate attention to the setting up of an integrated national network for educational information.
- c) Legislation to enable information systems to operate efficiently and effectively.

2. Information Acquisition, Processing, Dissemination and Utilization

- a) Systematic planning in the acquisition and dissemination of educational documents.
- b) Adequate processing of educational literature (abstracts, reviews, etc.) to meet the needs of different groups of users such as administrators, decision-makers and teachers.
- c) Keeping distribution lists up to date and complete.
- d) Awareness of existing educational information sources.
- e) Superior audio and visual quality in the presentation of materials.

3. Resources

- a) Funds for establishing and operating sound educational information systems and services.
- b) Qualified personnel for educational information service.
- c) Appropriate physical facilities and suitable materials such as space, equipment, computer hardware and software.

4. Language

Accessibility of educational information to different linguistic groups of users.

5. Quality

- a) Comprehensive educational information systems and services in different levels of education, geographical areas and sectors of national activity.
- b) Availability of relevant educational information for decision making, planning, research and other purposes.
- c) Adequate and representative educational information.
- d) Standardization of educational and technical terms between educational information systems.
- e) Appropriate procedures in collecting and processing data and in preparing data bases, with the aim of producing valid information.
- f) Sufficient attention to user needs in the collection of educational data leads to appropriate information.

6. Computerization

- a) Positive attitudes towards the use of computers in educational information systems.
- b) Personnel with specialized skills when computers are introduced.
- c) Obtaining sufficient funds for computer hardware.
- d) Deciding on the correct choice of hardware and system configuration.
- e) Availability of suitable software for specific needs.

The above discussion deals with certain broad issues related to the information needs for monitoring and evaluating literacy and continuing education programmes and indicates certain possibilities in this regard. The solutions indicated may not become applicable in all the countries as they need to be modified and adapted according to the educational situation and other factors prevailing in the respective countries. It may be mentioned that while some programmes of literacy and continuing education have been initiated in almost all the countries, not much thought and action has been devoted to the task of creating an effective system of monitoring and

evaluation. In this context, the broad guidelines indicated here can show the direction in which actions need to be initiated in many countries for strengthening literacy and continuing education programmes. It should be reiterated that since implementation of literacy and continuing education programme will necessarily depend on a wide network of organizations, each of which will be dealing with different but interdependent components of the total programme, a close monitoring and evaluation of the programme implementation is essential.

APPEAL Manual for Planning and Management of Literacy and Continuing Education (AMPM)

- Volume I : Policy Framework for Literacy and Continuing Education
- Volume II : Planning for Literacy and Continuing Education
- Volume III : Management of Literacy and Continuing Education
- Volume IV : Monitoring and Evaluation of Literacy
and Continuing Education

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