UNIT 8   CURRICULUM RENEWAL

Structure

8.1   INTRODUCTION

In the previous unit, we have discussed the process of curriculum planning and designing in the preceding units. You also studied the constraints which influence the decisions on curriculum development. Thus , so far you might have developed an understanding about the concept and process of curriculum planning and development.

In the previous unit, you came across the expression 'evaluation'. Evaluation is an essential component of curriculum planning and the development process. Curriculum evaluation is a process of delineating, obtaining and providing information useful for making decisions about curriculum development and implementation. In other words, to develop an effective and need-based curriculum you have to base your decisions on empirical evidence.

In this unit we will discuss the concept and importance of curriculum evaluation in the overall process of the development and implementation of curriculum. We shall also discuss various aspects of curriculum evaluation. You will also study the methods of restructuring curriculum. The discussion in this unit will enable you to participate in this regular and meaningful activity. By doing so you will be able to achieve the pre-specified objectives.

8.2   OBJECTIVES

After going through this unit you should be able to:

● discuss the need for curriculum evaluation;

● identify different sources for curriculum evaluation;

● evaluate a given curriculum or a part of it after considering different aspects; and

● use different methods to evaluate a curriculum depending on the stage of development of the curriculum.

8.3   CURRICULUM EVALUATION FOR RENEWAL

The process of evaluation is undertaken to determine the strengths and weaknesses of an existing or an under-construction curriculum so that curriculum renewal can take place. Curriculum renewal can occur with a regular review and reflection process and will focus on addressing specific identified issues. **Curriculum renewal refers to the process of reviewing the curriculum plan, if it does not prove to be effective on the following questions, then it requires revision.**

● Whether a curriculum is suitable in present context?

● Does it the curriculum as planned is also delivered?

● What the curriculum is good for?

● How far the intended audience/target group is benefited?

● Whether it has included the latest methodologies?

From the above five questions, it is clear that curriculum renewal can only take place when curriculum evaluation is done. Evaluation is an intergral part of curriculum planning and designing. Here, evaluation means both assessment of students to find how much of the intended curriculum has been transacted and also what actually happens in a classroom as experienced by the students when they are involved in learning activities. These experiences of the students need not be confined to the four walls of a classroom and within the stipulated time frame of a rigid school schedule. These could also include activities which form part of hidden curriculum like wearing a school uniform, standing up when the teacher enters the class and helping each other in organising an exhibition in the school. Thus we are interested in looking at evaluation not just as the evaluation of activities inside the classroom but also as the evaluation of the school as a whole against the curriculum issues.

Curriculum evaluation is a process by which we can make decisions about a curriculum in terms of course improvement, individuals involved - teachers, students etc. and administrative effectiveness.

It focuses on discovering whether the curriculum as designed, developed and implemented, is producing or can produce the desired results. It also helps to identify, the strengths and weaknesses of the curriculum before implementation and the effectiveness of its delivery after implementation.

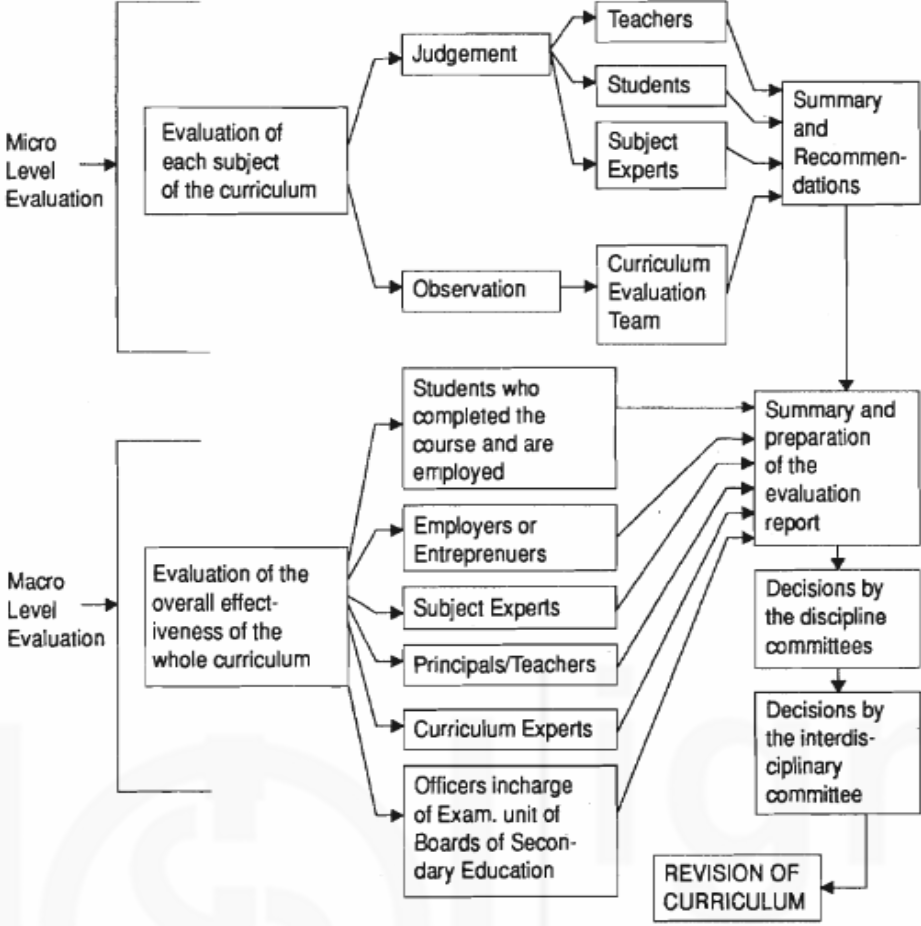The curriculum evaluation process is schematically represented in Figure 8.1.

Fig. 8.1: Curriculum Evaluation Process

The curriculum evaluation process is not a one-shot affair. It is rather a dynamic and cyclic process. Curriculum evaluation plays its role in all stages of the curriculum cycle. The curriculum cycle is schematically represented in Figure 8.2.
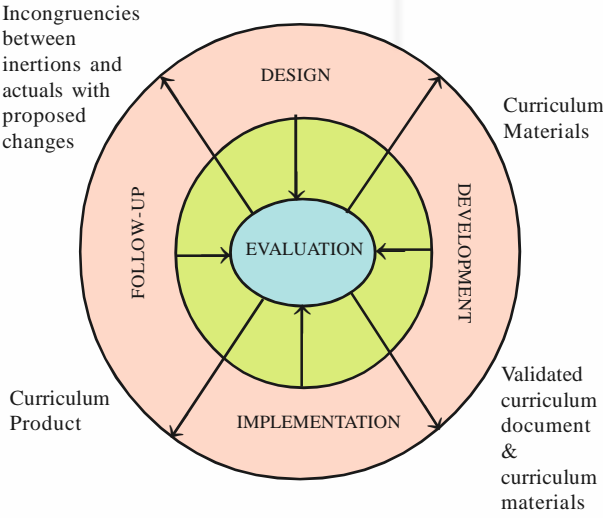

Fig. 8.2: Conceptual Framework of Curriculum Cycle

The curriculum cycle shows that curriculum evaluation is a comprehensive activity. It should be frequent and recurrent. It is needed at almost every stage of curriculum design and implementation. Through frequent evaluation of curriculum we show whether we are really moving towards the pre-fixed goals.

8.3.1 Need for Curriculum Evaluation

Now the question arises "Why do we need curriculum evaluation?" The professional response to this question stresses improvement of student learning, and hence improvement in the quality of education. The following are the main purposes of curriculum evaluation.

i)   To develop a new curriculum

If you wish to develop a new curriculum for a vocational course at the secondary stage, it would be worthwhile to evaluate a current curriculum from a different system before adopting it to our emerging requirements. The usual practice would be to prune an existing curriculum to suit our new requirements because at times the decisions in the planning process can be quite arbitrary. Such a process leads to the risk of overloading the curriculum. To make objective decisions on the development of the new curriculum, evaluation of the existing curriculum is necessary.

ii) To review a curriculum under implementation

It may be required by policy planners and decision makers to get an immediate feedback on the implementation of a curriculum in order to make amendments if required for effective realisation of all the objectives related to it. A curriculum evaluation exercise would be necessary for this purpose.

iii) To remove 'dead wood' and update an existing curriculum

It is essential to remove obsolete ideas and practices from a curriculum and include current developments in the curriculum. In order to make objective decisions about inclusion or deletion of content or practices a curriculum evaluation exercise would again be necessary.

iv) To find out the effectiveness of a curriculum

To make an objective evaluation of the effectiveness of a curriculum in terms of the achievement of its immediate as well as long-term objectives, a curriculum evaluation exercise would be essential. This evaluation is different from the evaluation of the students of a course for the purpose of certification. The difference is that curriculum evaluation is more comprehensive and includes student evaluation plus the feelings generated among the students regarding appropriateness of the various components of the curriculum.

Check Your Progress

Notes : a)   Write your answers in the space given below.

   b)   Compare your answers with those given at the end of the unit.

1)   Why do you need to evaluate the curriculum of a particular grade in a school set up?

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2)   What do you mean by curriculum renewal?

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8.4 SOURCES OF CURRICULUM EVALUATION

There are several sources from where meaningful information can be collected regarding a given school curriculum. Major sources are discussed below.

i) **Learners**

The learners of a particular course are the primary and most important source of information regarding how relevant the intended curriculum is and how well it is being implemented. The list of the output specifications can be given to the learners who are undergoing a particular course and detailed information can be gathered in two ways:

- by finding out whether the learners have really achieved the intended output specifications.

- by finding out the perceptions of learners regarding the extent to which they feel they have achieved the objectives of the course. This information is more qualitative in nature as these arc the perceptions of students and they are of immense value from the point of view of revising the curriculum. Such valuable data can be collected even from students who have passed out and who have already learnt through the implementation of the curriculum.

ii) **Teachers and other Subject Experts**

In the process of curriculum renewal, teachers must be involved as they transact the curriculum in the class. They can help in curriculum mapping, which is the process of content alignment in accordance with curriculum goals. The subject experts also helps in curriculum mapping from the discipline point of view.

iii) **Curriculum Experts**

Curriculum experts can provide information on the modem techniques used for developing a curriculum so that it becomes more meaningful from the student's point of view. The age old practice of assembling content points, in a telegraphic language into a syllabus, has become outdated. In the meaningful curriculum the output specifications, are made clear, i.e. the curriculum specifies as to what the students will be able to do at the end of the course, the conditions under which they will be observed and the level of acceptance of errors. Curriculum experts have come a long way since then and their assistance in curriculum evaluation is inevitable. Therefore, curriculum experts are a good source of information for curriculum evaluation.

iv) **Policy Makers**

Policy makers occupying responsible positions in apex bodies like Central Board of Secondary Education (CBSE), National Council of Educational Research & Training (NCERT), National Open School (NOS) and State Boards of Secondary Education are also excellent sources of information for curriculum evaluation. By virtue of their position they are better informed about the current and the envisaged changes in government policies regarding economy, industry, agriculture and education. All these areas have direct or indirect implications for school curriculum. There have been quite a few instances in the recent past where even the change of governments in a state was responsible for making specific changes in textbooks of

History and Science! Therefore, policy makers can be an important source for the curriculum evaluation.

v) **Community:** The local community where the products (educated/trained persons) of a particular course are to be absorbed can be yet another important source of information for curriculum evaluation. The requirements of the local community can make the curriculum relevant and need-based or otherwise. A curriculum revised on the basis of needs and requirements of the community will be able to serve the cause of the community better in producing better socialised and more responsible citizens.

vii) **Dropouts Sample:** Those students who have dropped out of a particular course can be yet another valuable source of information for curriculum evaluation. These students can pin-point the curricular factors that might have been responsible for their withdrawal from the course. A diagnostic test administered on these dropouts can provide valuable information regarding the misconceptions generated by the present curriculum. This feedback will help in modifying or improving the curriculum.

vii) **Employers and Entrepreneurs:** The opinion of the employers, who have to absorb the products needed by them, will reflect on the strengths and weaknesses of the curriculum. Those who are self-employed, even in the unorganised service sector can provide valuable information on the strengths and weaknesses of a particular curriculum. Such information can help in making the curriculum socially relevant and useful.

Check Your Progress

Notes : a) Write your answers in the space given below.

b) Compare your answers with those given at the end of the unit

3) Why should the reactions of dropouts on curriculum be sought?

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4) Why should the reactions of employers on curriculum be sought?

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8.5 METHODS OF CURRICULUM EVALUATION

Curriculum evaluation can be done by an external agency or by insiders (those who are involved in the planning and development of the curriculum) or by a combination of both the groups. A combination of outsiders and insiders would be preferable to get a comprehensive and objective evaluation. The methods of evaluation vary from a questionnaire based evaluation to evaluation based on unstructured interview. The method of collecting information would depend on the objective of evaluation. When we require more qualitative descriptions of the implementation of the curriculum, unstructured or structured observations can be used. When we require quantitative data regarding various aspects of

a curriculum being designed, a check-list can also be used. Similarly many other techniques can be used depending on the purpose of evaluation and the stage of evaluation i.e., whether evaluation is being done at the development stage or at the implementation stage. Curriculum evaluation at the planning stage is mostly confined to job analysis or task analysis. Similarly the content analysis that follows also requires the support of formative evaluation. These exercises are usually not practiced in schools and so the curriculum suffers from several drawbacks. A well prepared school curriculum should accommodate an evaluation cycle at the planning stage also.

8.5.1 Evaluation during Curriculum Development

One of the major tasks during the development of a curriculum is to prepare an exhaustive list of specific objectives to be achieved through the curriculum. Once the list is prepared, it has to undergo an evaluation cycle. The list may be supplied to a set of practicing teachers for their specific comments, additions and deletions, if any. In addition to working teachers, information from other individuals like prospective employers of the products, the next higher grade teachers, a group of prospective students, planners and administrators, etc., can be sought to check whether the entry behaviour of their grade suits the output specifications. Based on the feedback collected from the evaluators the objectives can be modified.

A second major task which requires the support of an evaluation exercise during the development of a curriculum is the instructional materials that have been prepared to achieve the objectives. These materials have to be tried out on a sample of students for their feedback on their learning routes and difficulties. A field tryout with a small sample is ideal in getting adequate evaluation information from a sample. This can be used for further improvement of the material. Data collected from the inbuilt evaluation exercises of the learning material can also be used in modifying the learning material. Curriculum material here refers to all learning materials which includes textbooks, self-learning text, audio and video programmes, teacher's manual, assignment questions, project work, etc. Similarly, the evaluation procedures to be adopted during curriculum development also need a tryout and possibly further modification based on data collected through the tryout.

8.5.2 Evaluation during Curriculum Implementation

After the curriculum has been tested and the curriculum materials are duly modified, it is important that the teachers and administrators are oriented and trained for proper implementation of curriculum. To implement curriculum without introductory or supporting courses would be quite a severe risk; it may lead to the use of new materials in unsatisfactory ways. Training of the personnel involved and the provisions of all necessary facilities and resources are essential for successful implementation of any curriculum.

Evaluation is necessary at the time when curriculum is implemented as well as after each offering of the course. The purpose of evaluation at this stage is two-fold (a) to find out the areas of support needed for effective implementation of the curriculum in schools; and (b) to control the quality of the product i.e. the educated person. Important information to be collected at this stage includes:

The existing situation: All aspects of curriculum according to the curriculum plan need to be studied in order to identify the missing features of the curriculum

being implemented in the schools. A check-list which gives all the features of the objectives and the content of the curriculum, students' characteristics necessary to begin the teaching-learning process, teachers' characteristics necessary for implementing the curriculum, basic assumptions regarding how teaching and learning should take place to ensure active participation of the students, additional materials required to implement the curriculum, organisation of the curriculum with respect to time requirements and the order in which the activities and the materials are to be processed, methods of implementation of the curriculum and evaluation of students' performance can be used to assess the discrepancies or the gaps in the implementation of different aspects of curriculum.

i) **Effectiveness of the curriculum:** The crucial question in determining the effectiveness of curriculum is to determine the extent to which the students attain the standards or achieve the objectives as described in curriculum planning. Thus the effectiveness of curriculum reveals whether curriculum is able to achieve objectives set by the social system.

Since it is not possible that cent per cent students achieve all the objectives of the content, the question of concern is whether the minimum expected number of students achieve the minimum specified number of objectives according to the criteria. The criteria for judging the effectiveness of the programme should also provide feedback from the employers and ex-students. Effectiveness may also be considered in relative terms i.e., whether the new curriculum is more effective than the previous one. For this a time series study may be most appropriate.

ii) **Acceptability of the programme:** In addition to assessing the effectiveness of the curriculum it is also important to assess its acceptability. Acceptability here means whether the people involved in implementing the programme like it or do not To get an insight into the acceptability of the programme, the perceptions of students, teachers and the supervisors/administrators of the school should be ascertained.

iii) **Efficiency of the programme:** The expressions - effectiveness and efficiency - are used for specific purposes. The efficiency of curriculum indicates whether curriculum is able to achieve objectives in the most economic way in terms of minimum cost, time and energy. The effective curriculum ensures that pre-fixed objectives are achieved irrespective of the amount of time and/or money spent. Effective and efficient curriculum will ensure that objectives are achieved with minimum resources efforts and money. Efficiency means the ratio between the output and the input of energy and resources. It is very easy to calculate efficiency of a machine in absolute terms. However determining programme efficiency is extremely difficult in the case of any social system, like education. Valid assessment of an educational programme is indeed very difficult. Controlled experiments can be of great help here but it is difficult to control the significant variables. Nevertheless, it is important to assess the programme efficiency relative to those of other programmes in the light of achieved effects. The major questions posed in judging the efficiency of the programme are as follows:

● Do the outcomes of the programme justify the expenditure on the total resources?

● Is the given curriculum more efficient than the previous one?

- Is there any wastage of student time, teacher time or of materials and resources?

- Are equipment and personnel under-utilised?

- How can programme efficiency of a given programme be improved?

8.6   MODELS FOR CURRICULUM EVALUATION

There are many proposed model for curriculum evaluation such as :

a)   Tyler's Model

b)   CIPP model

c)   Stake's Model

d)   Kirkpatrick's Model

e)   Scriven's Model

Let us discuss the following two models briefly.

a)   Tyler's Model

It is one of the most popular planning model developed by Tyler in 1949. May (1986) defines that Tyler's model considers three primary sources of curriculum-students, society, and subject matter in formulating tentative general objectives of the program that reflects the philosophy of education and the psychology of learning.
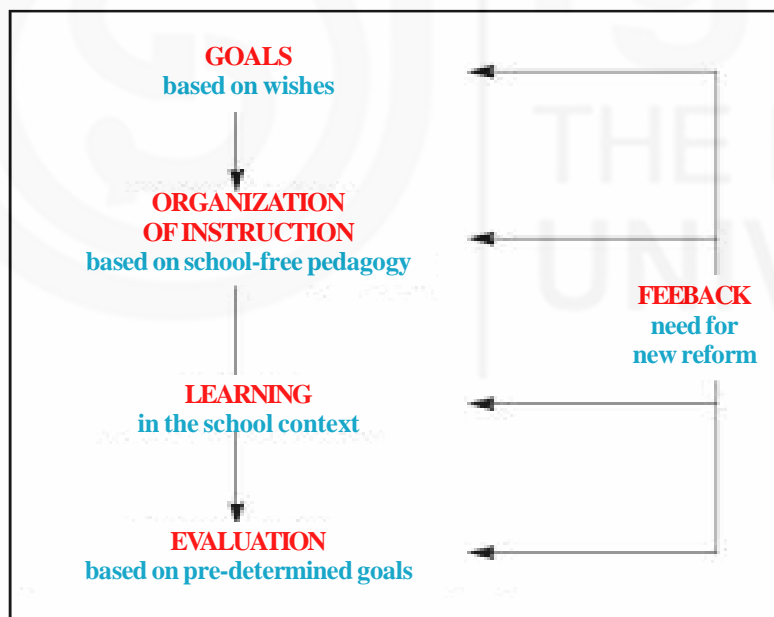

Figure 8.3: The vicious circle of educational reform discourse

Tyler's 1949 curriculum model is a four part linear model that consists of objectives, instructional strategies and content, organization of learning experiences, and assessment and evaluation that was designed based on four questions:

1.   What educational purposes should the institution seek to attain? (Objectives)

2.   What educational experiences are likely to attain these objectives? (Instructional strategies and content)

3.   How can these educational experiences be organized effectively? (Organization of learning experiences)

4. How can we determine whether these purposes are being attained? (Assessment and evaluation)

b) CIPP Model

It was developed by Daniel Stufflebeam and colleagues in the 1960s. CIPP is an acronym for Context, Input, Process and Product. CIPP is an evaluation model that requires the evaluation of **context**, **input**, **process** and **product** in judging a programme's value. The model defines evaluation as the process of delineating, obtaining, and providing useful information for judging decisionalternatives.

Figure 8.4: CIPP Model of evaluation

These four aspects of CIPP evaluation assist a decision-maker to answer four basic questions:

*   **What should we do?**

This involves collecting and analysing needs assessment data to determine goals, priorities and objectives. For example, a context evaluation of a literacy program might involve an analysis of the existing objectives of the literacy programme, literacy achievement test scores, staff concerns (general and particular), literacy policies and plans and community concerns, perceptions or attitudes and needs.[1]

*   **How should we do it?**

This involves the steps and resources needed to meet the new goals and objectives and might include identifying successful external programs and materials as well as gathering information.

*   **Are we doing it as planned?**

This provides decision-makers with information about how well the programme is being implemented. By continuously monitoring the program, decision-makers learn such things as how well it is following the plans and guidelines, conflicts arising, staff support and morale, strengths and weaknesses of materials, delivery and budgeting problems.

● **Did the programme work?**

By measuring the actual outcomes and comparing them to the anticipated outcomes, decision-makers are better able to decide if the program should be continued, modified, or dropped altogether. This is the essence of product evaluation.[

Check Your Progress

Notes : a) Write your answers in the space given below.

b) Compare your answers with those given at the end of the unit

5) What is evaluation during curriculum implementation?

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6) What are the four components of Tyler's model?

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8.7 RESTRUCTURING CURRICULUM

Any given curriculum needs restructuring prior to its implementation. This restructuring can be done at a macro-level and at a micro-level. At the macro-level obsolete elements may be removed, recent developments in the field may be added and the sequence of content may be rearranged. At the micro-level, a teacher may find the sequence of content suitable for a presentation. But if (s)he wishes to have participative techniques of teaching, the sequence may not be suitable and so (s)he would like to reorganise the sequence of the content to suit her mode of presentation. Such micro-level reorganisation is often done by teachers who are innovative in their teaching approach. There could be as many ways of micro-level reorganisation of curriculum as there are teachers.

Pre-testing of restructured curriculum: Macro-level restructuring when carried out on an existing curriculum requires to be pre-tested prior to implementation. This testing would reveal whether the envisaged changes have the desired effect or whether the curriculum still needs modification. It is preferable to do such restructuring under actual teaching-learning conditions.

Search for affirmative models for curriculum revision: The techniques of curriculum revision described in this unit have been in use since long and more dynamic models are being developed by professionals in various fields. Some of the relevant points of such models developed in technical and vocational education, medical education, etc., could be of interest to those who are involved in curriculum revision even at the school level. There should be a constant search for such models, by educational planners and implementors at the school level. Perhaps, for secondary education a suitable and dynamic model could be developed by those concerned with secondary curriculum development.

Check Your Progress

Notes : a) Write your answers in the space given below.

b) Compare your answers with those given at the end of the unit

7) What is micro and macro level planning?

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8.8 LET US SUM UP

In this unit you have studied five reasons that may necessitate a curriculum revision exercise, viz., i) to modernise a curriculum, ii) to remove 'dead wood* from a given curriculum, iii) to make a curriculum more efficient, iv) to reduce the gap between what is intended and what is actually realised, and v) to realise the latent curriculum which may not be so tangible. You have also studied four purposes of curriculum evaluation viz., i) to develop a new curriculum programme based on the evaluation report of an existing curriculum, ii) to review an ongoing programme, iii) to remove obsolete material from a curriculum and update it with recent developments in the field, and, iv) to study how effective an ongoing programme is.

You have studied a variety of sources from where useful data for curriculum revision can be collected e.g. learners, teachers, subject experts, curriculum experts, policy makers, responsible members of the community and even a sample of dropouts of a programme. Besides these, you have studied different aspects of curriculum evaluation. You have studied the various methods used for curriculum evaluation and the phases during which these methods have to be adopted. The methods discussed may not appear comprehensive enough in view of the pace at which curriculum revision should be taking place as against the pace of developments in various fields. Therefore, it is recommended that more comprehensive curriculum evaluation methods should be developed by practitioners in the field.

The last section of this unit was devoted to restructuring the curriculum at the macro and micro-levels. Macro-level restructuring is required to make the curriculum suited to the approach adopted by an individual teacher for transacting it in the classroom. Micro-level restructuring by one teacher can be different from that of another teacher who takes a different approach about the same curriculum.

8.9 UNIT-END EXERCISES

1. Take up a secondary school subject that you have been teaching in your school. Collect relevant information that you may require to evaluate the

curriculum according to the suggestions given in this unit. Analyse the results and find out whether the subject curriculum requires any updating. If 'yes' suggest appropriate actions to be taken. If 'no' give reasons and justify the same.

2. On the basis of your experience as a teacher, identify a unit which according to your students is very difficult to learn. Plan and prepare instructional material for its remedial teaching. Try out the material on a sample of students and study the effectiveness of the materials prepared by you.

8.10 ANSWERS TO CHECK YOUR PROGRESS

1. The need to evaluate a school curriculum arises out of the following reasons:

    ●   to cope with the recent advancements in the field of knowledge,

    ●   to remove redundant material from the curriculum which has become obsolete,

    ●   to identify the gap between the requirements of the next grade and the objectives of this grade and to fill in these gaps with appropriate learning experiences,

    ●   to make the curriculum more efficient in achieving the envisaged objectives, and

    ●   to assess the extent to which the latent curriculum has been achieved (in terms of developmental objectives).

2. Learner will answer as per their understanding.

3. The drop-outs have actually been exposed to the curriculum; hence, they can reveal the weaknesses of the curriculum. The reasons for their withdrawal from the course can also throw light on the effectiveness of the curriculum.

4. Employers' reactions on curriculum are sought because they are the consumers of the products of a particular curriculum. They are, therefore, the best judges to point out the strengths and weaknesses of the curriculum. The employers will also be able to tell where the students are able to use the knowledge acquired in the schools in practice. Their feedback can make the curriculum more meaningful and need-based.

5. Evaluation during implementation has two fold purpose: (a) to find out the areas of support needed for effective implementation of the curriculum in schools; and (b) to control the quality of the product i.e. the educated person.

6. Objectives, instructional strategies and content, organization of learning experiences, and assessment

7. At the macro-level restructuring, obsolete courses elements are removed and they are substituted by recent/update content. At micro-level the teacher does not change the existing curriculum. S/he adopts various innovative/ appropriate teaching techniques in arranging and transacting curriculum. At micro-level the teacher uses his/her resourcefulness in transacting curriculum.

8.11   REFERENCES AND SUGGESTED READINGS

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