UNIT 17  CURRICULUM EVALUATION

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17.1  INTRODUCTION

So far we have discussed the concepts of curriculum, its bases, planning the curriculum and its development. The process of curriculum development consists of curriculum planning, development of curricular materials and other curricular processes. Curriculum evaluation is the next step in the process of curriculum development. It is an integral part of the curriculum development process. Curriculum evaluation assesses the effectiveness of a curriculum and enables us to compare what we have achieved with what we had set out to achieve.

None of us can dispute the importance and necessity of curriculum evaluation. Yet those responsible for evaluating curricula do not always consider it a useful process. Many schools do not have the required resources to conduct evaluation and school personnel do not attach much importance since evaluation results are generally ignored. A variety of meanings are ascribed to the term evaluation and the term itself leads to confusion. Yet various aspects of the school process, which contribute to student learning, can be evaluated. For example, the usefulness of programme objectives, the degree to which students achieve those objectives, the contents activities, the plans, methods that are a part of the curriculum can be evaluated. Teachers’ performance, learner skills, behaviours, achievement etc. can be subjected to evaluation. Evaluation occurs at various levels from national to classroom and involves a variety of people –
students, teachers, administrators etc. Evaluation has a role for every type of decision making in the curricular process.

In this unit we will discuss the concept of curriculum evaluation, its nature and purpose. Various approaches to curriculum evaluation will be dealt with and also a definition for curriculum evaluation will be presented. Some of the models of curriculum evaluation will be developed. The models share common characteristics. We shall also discuss some methodological issues related to evaluation. The unit will also focus on the role played by various people in the evaluation enterprise.

### 17.2 OBJECTIVES

After going through this unit you should be able to:

- define curriculum evaluation;
- discuss the approaches to curriculum evaluation and differentiate among them;
- describe the characteristics of evaluation;
- discuss models of curriculum evaluation;
- explain the phases of evaluation; and
- examine the cooperative role played by various categories of people in curriculum evaluation.

### 17.3 CURRICULUM EVALUATION – NATURE AND PURPOSE

There is a diversity of opinion regarding the nature and purposes of evaluation. Any one definition of the concept of evaluation can be misleading. Evaluation is actually a connection between what is and what ought to be. It serves as a guide to decide whether to change, accept or delete something - ranging from the curriculum in general or a textbook in particular. It is a process or group of processes that will enable curricularists to take such decisions. During evaluation relative values are assigned to whatever people are judging. They try to determine whether the intended goals are being achieved, or not. Curriculum evaluation strives to determine whether the curriculum as designed, developed and implemented is achieving the desired results. It also ascertains the strengths and weaknesses of the curriculum before and after its implementation. Based on this data, curricularists can modify, retain or discontinue the curricular program. Evaluation enables them to improve the curriculum.

Oliver (1977) has identified three thrust areas in evaluation for curriculum improvement. These are: (1) within the curriculum as done by teachers in classrooms; (2) the entire curriculum, i.e. by evaluating the curriculum’s success in achieving the desired goals and (3) about the process used in improving the curriculum.

#### 17.3.1 Evaluation Questions

Different people approach evaluation differently depending on their philosophical orientation.

Talmage (1985) has discussed five types of value questions pertinent to evaluating curricula. They can be categorised as questions of:

- intrinsic value
- instrumental value
- comparative value
Let us take up each of these value questions in the given order for discussion.

The question of intrinsic value
It addresses the appropriateness of a curriculum in a given context. It deals with the curriculum as planned and also with the finished curriculum as it is delivered.

The question of instrumental value
It attempts to clarify:
- What the curriculum is good for?
- Who the intended audience/target group is?

The curriculum planned is linked with the goals and objectives stated for the programme. It tries to find out, whether what is planned in the curriculum will be attained, to what extent, by whom, i.e. the target group. Hence, the target group should be identified at the beginning of the curriculum activity itself. Evaluation efforts should identify the types of students who are likely to benefit the most from the curriculum being planned.

The question of comparative value
Such a question is often raised when new programmes are introduced. Usually new programs are created when people feel that the existing programme is inadequate. Often, when dealing with the question of comparative value, we get caught up in making comparisons of two dissimilar programs, with different objectives/goals. We cannot ask, for example, whether or not a programme that stresses skill training is better than one that stresses value-structure of the world. Being different, a comparison of such programs will be of little help for purposes of evaluation. Hence, comparisons are useful in the case of identical programs. Here comparison of programmes includes ease of delivery, cost, student achievement, demand on resources, community-responsiveness or otherwise, role in the school organization, etc.

The question of idealization value
This question requires continued action throughout the delivery of the new programme. Educators must constantly ask themselves how they might fine tune the program's content, materials, methods, and so on, so that students can derive optimal benefits from experiencing it.

The question of decision value
The main focus of this question is on decision-making, i.e., whether to retain, modify, or discard the new programme. It is an ongoing question, because at every stage of curriculum development and delivery a decision has to be taken. [Ornstein and Hunkins, 1988.]

17.3.2 Defining Curriculum Evaluation
Put together five questions mentioned above should help us suggest that 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.

Before we proceed to a detailed discussion on the technical details of curriculum evaluation, we must have a brief idea of these two terms, i.e. 'Curriculum' and 'Evaluation', 'Curriculum' is a system of learning experiences deliberately designed and transacted for realising certain goals. As for evaluation, it is a systematic process of determining and appraising the proficiency level of a system or a practice. Applied to curriculum, evaluation focuses on discovering whether the curriculum as designed,
developed and implemented, is producing or can produce the desired results. Evaluation serves to identify, the strengths and weaknesses of the curriculum before implementation and the effectiveness of its delivery after implementation.

Worthing and Sanders (1973) have defined evaluation as "the determination of the worth of a thing. It includes obtaining information for use in judging the work of a programme, product, procedure, or objective, or the potential utility of alternative approaches designed to attain specified objectives".

Bruce Tuckman (1979) has defined evaluation as "...the means for determining whether the programme is meeting its goals: that is, whether the measures/outcomes for a given set of instructional inputs match the intended or pre-specified outcomes".

All the above definitions point out that decision-making is central to evaluation. Evaluation enables educators to identify alternative curricular actions and determine various combinations of curricula to ensure maximum student learning in the light of overall programme goals. (Ornstein and Hunkins, 1988.)

### Check Your Progress

**Notes:**

a) Write your answers in the space given below.

b) Check your answers with the one given at the end of the unit.

1. Define Curriculum Evaluation.

2. What are five questions pertinent to curriculum evaluation?

### 17.4 APPROACHES TO CURRICULUM EVALUATION

Evaluation may be considered as a broad and continuous effort to find out the effects of implementing content and procedures to achieve pre-set goals. It is not content specific but is a methodological process. Michael Scriven feels that evaluation essentially consists of gathering and combining data in relation to a weighted set of goals or scales so as to allow people to make judgements about worth. [Ornstein and Hunkins, 1988.]

How people process data is determined to a large extent by their philosophical and psychological orientations. Humanists would argue that quantitative expression of learning outcomes are insufficient to determine the quality of learning. They feel that the learning experience is important in itself and should have helped the students in enhancing their self-concept.

A behaviourist would approach evaluation from a sequenced orientation, i.e. objectives will be clearly stated and relevant activities would be performed to achieve the intended outcomes. Whatever the orientation or posture adopted by the educator, evaluation still involves two dimensions – management and decision-making. They have to obtain data on which judgements will be based; communicate the effectiveness of curriculum to students and others; determine criteria to judge various aspects of curriculum and devise a management plan for all involved in the curriculum process.
17.4.1 Scientific and Humanistic Approaches

Cronbach (1982) has identified two approaches to evaluation – the scientistic ideals approach and the humanistic ideals approach. He has presented these two approaches at the two ends of an evaluation continuum. The scientistic end advocates experimentation and the humanistic end does not have faith in experimentation. The scientistic ideals believer focusses on experiment:

“A true experiment... concentrates on outcome or impact and embodies three procedures: (1) Two or more conditions are in place, at least one of them being the consequence of deliberative intervention. (2) Persons or institutions are assigned to conditions in a way that creates equivalent groups. (3) All participants are assessed on the same outcome measures” (Cronbach, 1982).

In this approach all efforts are focussed on the learners. Students' achievements in different situations are compared by way of test scores. Quantitative measures are adopted for data collection and statistical tools are employed for data analysis.

The humanistic ideals approach according to Cronbach is on the other end of the evaluation continuum. He describes it as very different from the scientific ideals approach:

“Writers at the humanistic extreme find experiments unacceptable. For them, naturalistic case studies are the panacea. A humanist would study a program already in place, not one imposed by the evaluator. If persons are assigned to a treatment, that is because the policy under study calls for assignment; assignments are not made for the sake of research. The programme is to be seen through the eyes of its developers and clients. Naturalistic investigators would ask different questions of different programmes. Benefits are to be described, not reduced to a quality. Observations are to be opportunistic and responsive to the local scene and not pre-structured”.

Analysis of data collected through humanistic approach differs significantly from that collected through scientific approach. Data collected through the former are more qualitative than quantitative. The techniques employed are basically observation, interviews, personal meetings and discussions with participants.

However curriculum evaluators tend to adopt a middle approach i.e. somewhere between the two ends of the continuum.

17.4.2 Intrinsic and Pay-off Evaluation

Evaluators may look at a curricular programme directly while others could study it quantitatively after it is implemented. The first type is called intrinsic evaluation by Michael Scriven (1978). The evaluators merely answer the question, “How good is the curriculum?”, instead of evaluating it on any criteria. Scriven cites the example of studying an axe to explain intrinsic evaluation. An individual would study an axe by examining the following aspects: design of the bit, the material used, the weight distribution, shape and fit of the handle. People assume that an axe of such dimensions would cut trees but they do not try it directly. Intrinsic evaluation of curricula implies that evaluators study the content, its sequence, organization, accuracy, learning experiences provided etc. They believe that with an accurate content and organization student learning would be stimulated. Most of the times evaluators tend to neglect the concept of intrinsic evaluation. Instead of asking the question, “How good is the curriculum?” They ask, “How well does the course or curriculum achieve its goals?” Educators must however establish the worth of the curriculum, its goals, objectives and related content. According to Scriven, pay-off evaluation occurs when the effects of the delivered curriculum are examined and its worth has been established. The effects of the curriculum on learners can be determined since this evaluation involves judgements based on pretest post-test scores or experimental group tests and control group tests and other parameters. Apart from students, its effects can be examined...
on teachers, parents and administrators. This allows evaluators to measure the attainment of objectives by learners which intrinsic evaluators cannot gauge. On the other hand, supporters of intrinsic evaluation counter that outcomes of curriculum do not actually show up because the present testing instruments and scoring procedures are laced with their short-comings. They also feel that to examine the full worth of a curriculum, the materials should be looked at directly rather than at students' test scores. (Ornstein and Hunkins, 1988.)

17.4.3 Formative and Summative Evaluation

Choice of evaluation techniques also depends on the kind of decisions that evaluators have to make. In this context, two terms are used, formative and summative evaluation. Formative evaluation aims to improve an existing programme based on the feedback obtained from the evaluation. Hence, programme developers must be frequently provided with detailed and specific information to guide them in the developmental phase. On this basis evaluators can revise the programme while it is being developed, before it can be implemented on a large scale. Formative evaluation can occur at several stages during the curriculum development process. At any stage the validity of the content can be checked, i.e. whether students are achieving the stated goal or objective by going through the content, if not then that content could be modified.

Cronbach (1990) has provided guidelines for conducting formative evaluation in an article where he has spoken of course improvement through evaluation. The important steps highlighted are:

1. "Seek data regarding changes produced in pupils by the course."
2. Look for multi-dimensional outcomes and map out the effects of the course along these dimensions separately.
3. Identify aspects of the course in which revisions are desirable.
4. Collect evidence midway in curriculum development, while the course is still fluid.
5. Try to find out how the course produces its effect and what factors influence its effectiveness. You may find that the teacher’s attitude toward the learning opportunity is more important than the opportunity itself.
6. During trial stages, use the teacher’s informal reports of observed pupil behaviour in aspects of the course.
7. Make more systematic observations, but only after the more obvious flaws in the early stages have been dealt with.
8. Make a process study of events taking place in the classroom, and use proficiency and attitude measures to reveal changes in pupils.
9. Observe several results of the new programme ranging far beyond the content of the curriculum itself — attitudes, general understanding, aptitude for further learning and so forth."

Evaluators differ in their ways of conducting formative evaluation. If they are evaluating only one unit plan then it would involve only those teaching the unit. However, if they are devising a new programme for the entire district then it would involve a formal and systematic procedure.

Since curriculum development takes place over a span of time it provides opportunity for guiding and shaping the curriculum. According to Gronlund (1985) it gives the teachers an opportunity to record both intended and unintended effects. The curriculum process is kept "open" since feedback is used and adjustments are made.

Summative evaluation assesses the effect of a complete programme. It is carried out at the end of an educational programme. It gives the picture of the curriculum in
Curriculum and Its Various Aspects

totality once it has been implemented on the learners. The effectiveness of the entire curriculum can be assessed through summative evaluation, or also of a particular programme or course within the curriculum. This type of evaluation is based on the evidence about “Summed” effects of various components or units in the curriculum, and hence it derives its name from it. The people involved in the curriculum process can conclude how successfully the curriculum has worked.

Since summative evaluation is carried out at the end of the curriculum activity it should not be construed as a one time affair only. It can occur at the end of some curricular unit plans. Summative evaluation could also be planned at certain points during the curriculum development process, for example, at the end of the first try out stage before the final implementation. This would help evaluators to check a curricular programme as it evolves into the final product. Whereas formative evaluation uses informal methods and processes, summative evaluation uses formal tools for gathering data. Tests are carefully designed for attainment of objectives. Teachers’ reactions are assessed formally through carefully prepared surveys. Students are assessed through tests at the end of the course or at the year end.

One of the main purposes of summative evaluation is to select from several completing curricular programmes, the one, which should be accepted, and those which should be discontinued. An experimental design would suit the purpose best. James Popham has illustrated such designs. He talks about the Pretest/Posttest control group design. Students are pretested on specified dimensions of the programs. After instruction, students in the different programs are tested for the attainment of a common set of objectives of the programs. Evaluators should not be biased towards any one set of objectives, but objectives set by other designers should also be tested. Students are randomly assigned to the programs so that each has an equal chance of being assigned to any programme. Differences in learner achievement would be due to differences in the programmes. Here the experimental unit of analysis is not the pupil, but schools or classrooms. If pupils of the same class are subjected to different programs, then the pupil becomes the unit of analysis. (Popham, 1988.)

Check Your Progress

Notes:  a) Write your answers in the space given below.
        b) Check your answers with the one given at the end of the unit.

3. Differentiate the following approaches for curriculum evaluation.

i) Scientific and Humanistic.

ii) Formative and Summative.

Having looked into the approaches of curriculum evaluation we shall now deal with a few models of curriculum evaluation.

17.5 CURRICULUM EVALUATION MODELS

The first major evaluation effort directed at curriculum was conducted under the direction of Ralph Tyler between 1933 and 1941. The study was concerned with the
total process of curriculum development and evaluation was an integral part of that concern. Tyler, through his efforts as research director of the study, greatly influenced – and still influences – the planning of evaluation studies. The following stages that Tyler (1942) has recommended in 1942 for curriculum evaluation still hold good:

i) Establishing broad goals/objectives
ii) Classifying objectives.
iii) Defining objectives in behavioural terms
iv) Finding situations in which achievements of objectives can be shown
v) Developing/selecting measurement techniques collecting student performance data
vi) Comparing data with behaviourally stated objectives.

He maintains that evaluation is a recurring process and that evaluation feedback should be used to reformulate or redefine objectives. In other words, information gathered could be ploughed into the system to modify the objectives and the programme, which is being evaluated. This recycling process keeps the evaluation system dynamic.

We shall now touch upon the few evaluation models, which have immediate relevance to our context.

### 17.5.1 Metfessel-Michael Model

Metfessel and Michael (1967) present a model with eight major steps in the evaluation process. It is a variation of Tylerian model.

The model can be presented diagrammatically as follows:

![Fig. 17.1: The Tyler-Metfessel-Michael Model.](Source: Ornstein and Hunkins, 1988.)

A variation of the Tyler Model this model clearly suggests among other things that evaluators should involve all those who will be 'affected' by the curriculum, i.e., teachers, professional organisations, senior citizens, students, etc. besides experts and conduct periodic observations throughout the implementation and maintenance of the programme using tests, cases, etc.

### 17.5.2 Congruence-Contingency Model

Very often curriculum evaluation depends on casual observation, implicit goals, intuitive norms, subject judgements, etc. However, Stake (1967) stresses on establishing formal
According to him, formal procedures will help increase the objectivity in evaluation. As they aim at furnishing data, we can make descriptions and judgements of the curriculum being evaluated. Stake argues that for evaluation purposes, we should not rely only on the statements of objectives/aims. We should allow all those 'affected' by the curriculum to extensively participate in judging the curriculum. He further maintains that the data can be collected under the following three bodies of information:

1. **Antecedent**: This is any condition that exists prior to teaching and learning that may influence the outcomes. For example, prior knowledge, aptitudes, psychological profiles of students, etc., years of experience of teachers, teacher-behaviour, etc.
2. **Transactions**: Learning transactions that occur between and among teachers and students, students and students and among students and resource people.
3. **Outcomes**: These are the consequences of education – immediate and long-range, cognitive and conative, personal and community-wide. For example, students' performance, achievements, etc. Stake, however, lays stress on even such outcomes as the impact of a new programme on teachers' perception of their competence.

Stake has presented the three categories of data into a matrix, which is represented diagrammatically in the figure below:

![Fig. 17.2: Stake's Congruence-Contingency Model.](source)

The term contingencies here refer to the relationships among the variables in three categories: antecedents, transactions and outcomes. Once the evaluator collects views on a curriculum from various sources like students, teachers, support staff, etc., he puts them on a matrix to identify the congruencies and contingencies among them. The model clearly shows that it provides an organizational framework that points to the data to be considered and compares what is planned and what has occurred.

### 17.5.3 Discrepancy Evaluation Model

This model developed by Malcolm Provus (1971) has the following four components:

i) determining curriculum standards

ii) determining curriculum performance
iii) comparing curriculum with standards
iv) determining whether discrepancy exists between standards set and curriculum.

If there is any discrepancy, it will be communicated to the decision-makers, who, in turn, have to incorporate necessary modifications at every stage. This they can do by doing any one of or a combination of the following:

- going to the subsequent stage
- recycling to a previous stage
- starting the curriculum over
- modifying the performance/standards
- terminating the curriculum

A diagrammatic representation is given below:

![Diagram of Provus's Discrepancy Evaluation Model](image)

**Fig. 17.3: Provus's Discrepancy Evaluation Model.**
*(Source: Ornstein and Hunkins, 1988.)*
Provus model is called discrepancy model because it compares the performance with standards to determine whether discrepancy exists between the two (Ronald Doll, 1996).

17.5.4 The CIPP Model

'CIPP' here refers respectively to the first letter of
- Context
- Input
- Process
- Product

Stufflebeam (1971) considers evaluation a continuous process and suggests that four types of decisions are required in evaluation efforts. The four types are:
- Planning decisions
- Structuring decisions
- Implementation decisions
- Recycling decisions

Corresponding to these decision types there are four types of evaluations: context, input, process and product. The following figure shows these types of evaluations in relating to the four decision types:

<table>
<thead>
<tr>
<th>ENDs</th>
<th>MEANS</th>
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<tbody>
<tr>
<td>Planning decisions to</td>
<td>Structuring decisions</td>
</tr>
<tr>
<td>determine objectives</td>
<td>design procedures</td>
</tr>
<tr>
<td>Recycling decisions to</td>
<td>Implementing decision</td>
</tr>
<tr>
<td>judge and reacy to</td>
<td>to utilize, control</td>
</tr>
<tr>
<td>attainments.</td>
<td>and refine procedures.</td>
</tr>
</tbody>
</table>

Fig. 17.4: Types of Decisions and Evaluation.
[Source: Ornstein and Hunkins, 1988.]

Let us now take up for discussion each of the four evaluation types.

Context evaluation

It involves studying the environment in which we run the curriculum. Stufflebeam maintained that context evaluation is the most basic type that provides a rationale for determining objectives. It helps us
- define the relevant environment
- portray the desired conditions pertaining to that environment
- focus on unmet needs and missed opportunities
- diagnose the reason for unmet needs

It should suggest that context evaluation is not a one-time activity. It continues to furnish baseline information regarding the operations and accomplishments of the total system.

Input evaluation

The purpose of this stage is to provide information for determining how to utilize resources to meet curriculum goals. At this stage we evaluate alternative designs in terms of how they will contribute to the attainment of objectives stated and in terms of
their demands upon resources, time and budget. We should consider them in the light of the procedural feasibility. In contrast to context evaluation, input evaluation is ad-hoc and micro analytic. It evaluates specific aspects or components of the curriculum plan.

**Process evaluation**

This stage addresses curriculum implementation decisions that control and manage the plan or curriculum. Through process evaluation, we can determine the congruency between the planned and actual activities. Stufflebeam presents the following three main strategies for process evaluation.

i) To detect or predict defects in the procedural design or its implementation during the diffusion stages. In dealing with plan or curriculum defects, we should identify and monitor continually the potential sources for the failure of the curriculum. The sources may be logistic, financial, etc.

ii) To provide information for curriculum decisions. Here we should make decisions regarding test development prior to the actual implementation of the curriculum. Some decisions may require that certain in-service activities be planned and carried out before the actual implementation of the curriculum.

iii) To maintain a record of procedures as they occur. It addresses the main features of the project design. For example, the particular content selected, the instructional strategies planned or the time allotted in the plan for such activities.

As process evaluation occurs during the production stage of curriculum, it helps us anticipate and overcome procedural difficulties and make pre-programmed decisions.

**Product evaluation**

It helps us determine whether the final curriculum product in use accomplishes the intended goals. Depending on the data collected, we can decide whether to continue, terminate or modify a curriculum.

**17.5.5 Connoisseurship Model**

The model recommends a process called educational criticism and connoisseurship. Thus, it is markedly different from the other models, which draw heavily on the quantitative technical posture of evaluation. The connoisseurship model, on the contrary, tries to furnish a qualitative description of educational life as a consequence of new programmes.

We should note here that Eisner (1985), the propounder of this model, draws heavily from the arts to strengthen his stance. He states, for example, that if an individual is to be an illuminating critic of painting, film etc., he/she must be a connoisseur. In other words, he/she must possess a great deal of knowledge about and experience with the type of phenomenon he/she is to criticize. Further, the critic needs to have an awareness and appreciation of the subtle qualities of the situation and write about the nuances of the situation in ways that help others to become more aware of the phenomenon under consideration. In essence, Eisner points out that educational connoisseurship is the art of appreciating what is educationally significant. But such appreciation is made public through criticism—the description, interpretation and assessment of the situation. In discussing his approach to evaluation, Eisner relies on the following two elements instead of scientific validity:

i) Referential adequacy: it requires the critic to check the critical observation and interpretations are empirically grounded. It allows the reader to experience the evaluated phenomenon in a new and better way.

ii) Structural corroboration: it is a continuous inquiry about whether the various parts to the criticism fit together as a consistent whole.
Besides, he stresses the importance of analyzing the works of students during the evaluation process by noting down what is said and done, rather than what is not done. Eisner, thus, advocates describing the 'tone' of the curriculum in action and the educational scene.

Check Your Progress

Notes:
(a) Space is given below for your answer.
(b) Check your answer with the one give at the end of the unit.

4. List two characteristics that distinguish the connoisseurship model from the other curriculum evaluation models.

All the models except Eisner’s Connoisseurship model are constructed in the same manner, i.e. they consist of logical steps arranged in a sequence. The steps in some of the models are adopted from system analysis which follows an eight step cycle. The first step is identifying the need, stating objectives, pointing out major constraints, developing alternative systems, selecting the best alternative, putting one into practice, evaluating the system and getting feedback for modifications. Eisner’s model is based on describing phenomena in different areas of experience. The participants of the curricular programmes are the judges since they are involved in the actions. The participants are teachers, students and administrators. Qualitative techniques are used to gather data from them e.g., interviews, autobiographies etc. In the final report data are organized, summarized and interpreted. [Doll, 1996.]

17.6 CURRICULUM EVALUATION PHASES

The previous models reveal that a variety of practices are involved in curriculum evaluation. Although there are various opinions about the precise steps, it is useful to know exactly how to proceed through the evaluation process. Whether the approach is scientific or humanistic, both have to focus on the curricular phenomenon and devise means, subjective or objective, to collect information. There should be a plan of action. A common process that is adopted for evaluation is:

Focus of Evaluation

Evaluators should decide what they will evaluate and how i.e. the focus and design. They have to determine the precise aspect of the curricular programme to be evaluated, i.e. whether it will be the entire school system or one school, the entire subject area curriculum or one unit in the subject etc. For this evaluators will have to define the objectives, identify the constraints and policies, level of decision-making, a scheduled time frame for completion of operations. Alternative action paths are determined and criteria identified for assessing results of curricular components.

Collection of Information

Evaluators identify the essential sources from which they will get information and methods they’ll employ to get them. In terms of the time schedule they also work out the stages of collecting information.
Organizing the Information

The information is organized in a manner that is easily understood and used by the target audience. The information is organised, stored and retrieved in a specific manner.

Analysis of Information

Suitable analysis techniques are selected and information is analysed. The choice of techniques will be based on the focus of evaluation.

Reporting Information

Depending on the audience the evaluators will decide the nature of reporting. Evaluators could use informal reporting techniques such as giving opinions, making judgements. They could also subject the information to statistical treatment and analysis.

Information Recycled

The process of curriculum evaluation is a continuous enterprise. The information is continuously recycled and re-evaluated to keep it updated. This will ensure a regular feedback for curriculum improvement. The pressures affecting school and curricula are ever changing. Hence the curricula should be flexible for modifications and adjustments.

The task of the evaluator is not merely to report the results. Alongwith this they should communicate the interpretations, analysis and recommendations as they work through the various stages. Sometimes evaluators themselves are the audience and they have to decide how to use that information and results. If they are involved with curriculum development they could give their recommendations to the curriculum decision makers and ensure that these are acted upon.

We must also bear in mind the management aspect of the evaluation process. At the very outset the management aspects should be worked out i.e. outline the various evaluation stages with their time schedules, assign tasks to people (allocation of work) and financial requirements per task should also be determined i.e. budgets prepared. [Ornstein and Hunkins, 1988.]

17.7 CHARACTERISTICS OF EVALUATION

Some important characteristics of evaluation should be borne in mind before evaluators actually begin the process of curriculum evaluation.

Values and Valuing

The initial step in the process of evaluation is the act of valuing or expression of values, which the evaluator holds. For example, it has been agreed in the past that the learning outcome at the basic education level, which is to be evaluated, is the mastery of the three Rs. So, whenever a group initiates evaluation it has definite beliefs about what is worth evaluating. At the end of the process, value judgements are made about the impact of the process.

Adopting Goals

In order to give the evaluation programme a definite direction, evaluators must display a definite orientation to goals. An educational programme could have goals ranging from getting information, comprehension, skill development, critical thinking, analysis etc. As soon as goals are set, methods of evaluating achievement of these goals are also decided. This testing helps to – (i) ascertain goal clarity and attainment and (ii) decide methods of evaluation likely to register their attainment.
Establishing Norms

Norms must be established for evaluation, in order to judge the quality and quantity of educational achievement. According to Doll (1996), "Norms come in different forms to answer different questions: (1) Is the desired behaviour present? (2) Is the behaviour what it should be? Considering factors such as ability, environmental circumstances, and resources? (3) Is the behaviour socially desirable? (4) Does the past record suggest that the behaviour is suitable for future use? (5) Does the behaviour result in the attainment of significant and worthy ends? (6) How much behavioural change is to be anticipated?" Norms are used to discriminate between individual students. They could also be used to discriminate between curricula. Some norms do not use comparisons, but simply permit judgement of quantity and quality of achievement in an educational activity.

Certain non-standard norms like criterion-referenced norms are used. They could be used as indicators of status and change in curriculum projects. They can reveal the overall success of the curriculum therefore norms must be incorporated.

Comprehensiveness

Though not an easy task yet evaluators should make evaluation as broad as the goals to which it pertains. It is difficult to evaluate changes in the affective domain – attitudes and appreciations. It could be made comprehensive using varied media.

Continuity

The process of evaluation is without exception placed at the end. This should not mean that it features last in the educational process. Evaluation should be a continual and ongoing process and should be carried out at every stage of the enterprise with skill and imagination.

Diagnostic Worth and Validity

In order to be appropriate the curriculum evaluation should reflect two characteristics – diagnostic worth and validity. Instruments of evaluation should be able to diagnose specific aspects of the educational process and should be valid i.e. measure what they seek to measure. In the context of curriculum evaluation validity implies the ability to measure the effects of the curriculum on repeated occasions.

Integration of Findings

An important aspect of curriculum evaluation is the integration of the results into a meaningful, comprehensive whole. Information left in a diverse and unintegrated state serves no useful purpose. In order that the findings of evaluation are meaningful, information should be organised and interpreted i.e. results should be integrated.

Progressing towards Goal Attainment

All evaluation seeks to ascertain its progress towards the goals. At the same time one must know what, when and how progress is occurring? Doll (1996) has given the following criteria of progress, which needs to be established –

1. "Are we really moving towards our goals? (Theme: perceptibility of movement)
2. How much movement is present? (Theme: Time and Space)
3. How fast is movement occurring? (Theme: rate)
4. What precisely can be said about directions of movement? (Theme: directed and aberrant motion)
5. How does the general movement we have discovered relate to other movements toward change or improvement? (Theme: relevance within the whole complex of improvement).” (Doll, 1996.)
17.8 PARTICIPANTS IN EVALUATION

I Hilda Taba maintained that evaluation is a cooperative activity. This cooperation is as necessary to the process of evaluation as it is to the various activities of the total curriculum” (Ornstein and Hunkins, 1988). (This cooperative endeavour extends to all phases of curriculum evaluation like devising the evaluation plan, selecting the evaluation design, instrument and throughout the evaluation stages right from framing objectives to integration of result and report writing). Evaluation decisions are not made by anyone person—student, teacher, administrator and neither about a single aspect. Decisions are made about several aspects and require coordination among all participants – teachers and administrators. Such a collective effort brings forth a picture of the curriculum in totality. If teachers collaborate they can get to know the impact of the curriculum on various types of students. If they work in isolation then decisions are restricted to only their group of students.

The main participants in curriculum evaluation are:

1. Evaluator

Several people play a role in the evaluation process but it is advisable to have one person in charge. This person or the evaluator shall coordinate with the school which administers the curriculum.

If the evaluator is a school member then it has several advantages –

(i) The evaluator is well versed with the system and its goals
(ii) Results are easily accepted since he is part of the school
(iii) It is economical since the evaluator is already on the school payroll.

However the disadvantages could be –

(i) May hesitate to issue or to deliver a critical report of the system of which he is a part
(ii) May have other pre-occupations and hence may not devote himself or herself totally to this enterprise.

The evaluator is basically an observer who gathers data and provides it to the decision makers.

"In theory the evaluator serves as the eyes and the ears of the decision maker. In this role he or she furnishes data gathered from observations about how the curriculum is functioning in the school. It is up to the curriculum coordinators, curriculum advisory committees and the teachers to take the data gathered, to judge their value, and then to act upon them. The evaluator is essentially a support person to the curriculum development and implementation efforts” (Oliva, 1988).

2. Teachers

Teachers should participate in curriculum evaluation. Usually they work alone or are generally involved in evaluating the instructional skills in delivering the curriculum. They should take active part by being involved in curriculum advisory committees which undertake programme evaluation. Hence teachers can serve as valuable agents for curriculum evaluation.

3. Committees

Curriculum evaluation/review could be done by several committees, since it is a cooperative activity. Ornstein and Hunkins (1988) suggest that most schools “should have a curriculum advisory committee and a special committee responsible for evaluation policy and procedure. Its membership can be similar to that of curriculum
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advisory committees – that is, participants could be teachers and administrators and representatives of the lay community. Depending on the school district and the curriculum level, students might also serve on this committee”.

4. Outside Experts

Schools can employ outside consultants to coordinate the evaluation enterprise. Sometimes schools do not have staff trained specifically for evaluation. In such a situation an outside person is called for evaluation. Some feel that the evaluator should always be an outside person for he’ll have no bias and will be more truthful and objective in his/her reporting.

5. Policy Makers

Policy makers holding responsible positions in national level bodies like NCERT, CBSE, State Boards of Education could also contribute to the evaluation process. Because of the positions they occupy they are better informed about the current and future changes in government policies, which directly or indirectly influence school curriculum. Recently the change of government has been responsible for changing the course content in some subject area textbooks for eg. History, Political Science, Science.

Check Your Progress

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

b) Check your answers with the one given at the end of the unit.

5. Why must curriculum evaluation process incorporate norms?

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6. What is the advantage of having a school member as an evaluator of curriculum?

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17.9 LET US SUM UP

The unit began with a discussion on the nature and purpose of evaluation and addressed the key questions that evaluation is concerned with. Curriculum evaluation is a major aspect of curriculum development and requires similar expertise and resources depending on the approaches adopted. We arrived at a definition of curriculum evaluation and discussed several models of evaluation. Curriculum is dynamic and continuous. Considering the complexity of the process, we discussed the essential characteristics of the process. These aspects emphasised that evaluators should bear these in mind before launching themselves into the evaluation activity. The last section of the unit dealt with various roles played by different participants of the curriculum evaluation activity.
17.10 UNIT-END ACTIVITIES

1. Identify some programme, course of study or unit commonly used in schools. After stating examples of the kinds of objectives that might be used in the programme ask the group to define as many variables as possible that might be considered in an evaluation. For each variable, describe type of data to be collected and discuss how it could be acquired.

2. Collect several examples of judgements about schools from local or national media. Analyze and discuss the examples, considering such concerns as data used to form the judgement, accuracy of opinions, opposing or conflicting data, and relevance of nationally based judgements to local schools.

17.11 SUGGESTED READINGS


17.12 ANSWERS TO CHECK YOUR PROGRESS

1. Curriculum evaluation is a process, which determines whether the curriculum as designed, developed and implemented is producing or can produce the desired results. It strives to identify the strengths and weaknesses of the curriculum before its implementation and effectiveness after its implementation.

2. The five types of value questions pertinent to evaluating curricula are the questions of:
   - Intrinsic value
   - Instrumental value
   - Comparative value
   - Idealization value
   - Decision value

3. i) Scientific approach focuses on outcome or impact of curricular experiences on learners. This assessment is done on the basis of test scores. It is an experimental approach. Advocates of the Humanistic approach to evaluation believe in the naturalistic case studies which are analysed qualitatively. Data is obtained through interviews, discussions, etc.
   
   ii) Formative evaluation is an ongoing evaluation which aims at improving an existing programme based on the feedback obtained from the evaluation. On the other hand, summative evaluation is carried out to assess the effect of a programme at the end.

4. Two characteristics distinguish connoisseurship model from others:
   i) It tries to provide a qualitative description of educational life as a consequence of a new curriculum.
   ii) It relies more on aesthetic criticism of the adequacy of a curriculum than its scientific validity.

5. Norms must be incorporated to –
   a) judge the quantity and quality of educational achievement
   b) Indicate the degree of change and improvement in the curriculum.

6. Advantages of having insiders as evaluators are:
   a) The person is well versed with the system and its goals
   b) It is economical
   c) It has easy acceptance by all of evaluator’s results.