
UNIT 1 CONCEPT OF CURRICULUM EVALUATION

Structure

- 1.0 Objectives
- 1.1 Introduction
- 1.2 Definitions of Curriculum Evaluation
 - 1.2.1 Evaluation of Learning Outcomes (ELO)
 - 1.2.2 Evaluation of Learning Systems (ELS)
- 1.3 Difference between Measurement, Assessment and Evaluation
- 1.4 Types of Evaluation
 - 1.4.1 Student Evaluation
 - 1.4.2 Institutional Evaluation
 - 1.4.3 Programme Evaluation
 - 1.4.4 Personnel Evaluation
- 1.5 Purposes and Functions of Curriculum Evaluation
- 1.6 Let Us Sum Up
- 1.7 Answers to Check Your Progress

1.0 OBJECTIVES

After carefully working through this unit, you should be able to:

- define curriculum evaluation;
- differentiate between measurement, assessment and evaluation;
- distinguish between the different types of evaluation; and
- describe the purposes and functions of evaluation.

1.1 INTRODUCTION

Education, as an institution in modern societies, has contributed much to human welfare, including intellectual, social and economic developments as well as the enlargement of knowledge and culture. The rapid changes in the socio-economic conditions of developing nations are responsible for the emergence of distance learning. Under the changing circumstances the learner can become a better learner at a distance, and all learners need help and assistance to develop better skills, knowledge and attitudes. Greater effectiveness and productivity of education can contribute still more to the advancement of nations throughout the world. But two questions arise here: 'How can we measure the effectiveness and productivity of education?' and 'How can we improve the quality of educational services?' To answer these questions we need to know the concept and role of curriculum evaluation in education. Evaluation of both the processes and products of education becomes imperative not only to (convince?) us as to what work is going on in the whole educational system, but also and more importantly, to know to what extent the goals of education have been achieved. In short, it helps to build an educational programme, assess its achievements and improve upon its effectiveness. It serves as an in-built monitor within the programme and helps to review, from time to time, the progress in learning. It also provides

valuable feedback on the design and the implementation of the programme. The curriculum has become broader based than before. Flexibility has been enhanced by providing more options. Learners are able to widen their horizons and equip themselves with a broader spectrum of knowledge in order to adjudge the various career opportunities available. Thus the role of curriculum evaluation in educational programmes is significant. Keeping this in view, we shall now look at the concept and role of curriculum evaluation. In this unit, we have given an overview of the evaluation processes and of the various types and functions of curriculum evaluation.

1.2 DEFINITIONS OF CURRICULUM EVALUATION

Evaluation can be defined in numerous ways. In one sense we evaluate all we do all the time. However, Curriculum evaluation is the process by which we attempt to gauge the value and effectiveness of any particular educational activity with regard to the student who takes part in it. For example, how much he/she knows about mathematics; the distance between your workplace and residence; a student's score in a science achievement test is 60; John got an 'A' grade in an assignment response etc. You can think of many other similar examples. All the above statements are based on some sort of evaluation. This is often relative to an implied standard of reference or normal condition. We make judgments either by observing something or by measuring it and giving it a quantitative/qualitative value. We evaluate all we do all the time whether we are working in an institution, or watching a television programme. Most of our day to day assessments are informal and often at the subjective level but we do make attempts at being more systematic, organized and rigorous when participating in certain processes. For example, judging, marking and recording an essay competition in an institution, comparing the temperature or rainfall figures of major cities, etc. In these cases the evaluation process is more systematic and organized. So, the term **evaluation** here is used in a number of different ways. To put it succinctly, we can say that evaluation is '**to find out the value of**' or '**to judge the worth of**' or '**to estimate the magnitude and quality**' of something. There are a number of ways to define evaluation. We may define it in two distinct ways, or see it as existing in two different forms in relation to education:

- i) Evaluation of learning outcomes (ELO); and
- ii) Evaluation of learning systems (ELS).

Let us discuss them here.

1.2.1 Evaluation of Learning Outcomes (ELO)

Evaluation is the systematic process of determining the extent to which the specified instructional objectives previously identified and defined have been achieved. Here the process of evaluation is based on the relationship between the objectives of the content and its actual outcome. The actual outcome can measure the intended learning outcome. Ideally, the instructional objectives will clearly specify the desired changes in learners and the instruments will provide a relative measure or description of the extent to which those changes have taken place. The following figure (Fig.1.1) can give you a clear idea about the evaluation process.

Fig.1.1 should help you clarify a number of pertinent points regarding evaluation of learning outcomes.

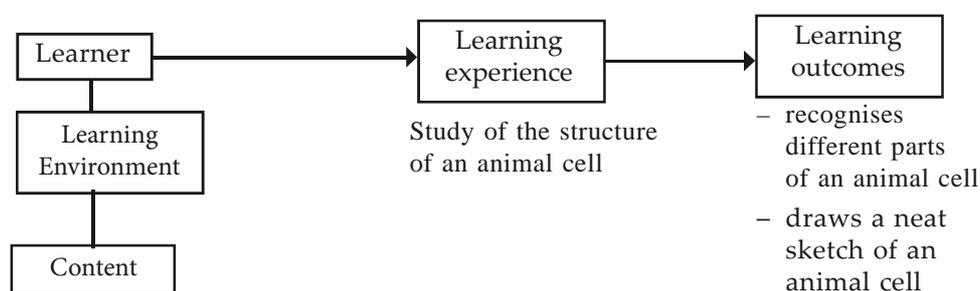


Fig. 1.1: The process of evaluation

This box-diagram should help you clarify a number of pertinent points regarding evaluation of learning outcomes.

Firstly, you can realize that objectives establish direction and that when they are stated in terms of learning outcomes they go beyond knowledge of the specific course content. You can note the difference between the ‘**study of**’ and ‘**recognises**’ cell structure. The process (study of an animal cell structure) includes the interaction of the teacher, learner, content and the learning environments to effect learning outcome (recognising different parts of an animal cell and so on).

Secondly, you can realize the varying degrees of dependence that the outcome, i.e., **recognises** and **draws**, has on the course content. The learning outcome **recognises** is a specific outcome of major instructional objective **knowledge**. The learning outcome **draws** is a specific outcome of the major instructional objective **skill**. From this discussion, it is clear that these specific learning outcomes, which are easily attained, can be observed and measured directly in an instructional system.

Thirdly, if the defined objectives are achieved, decisions will be taken in a particular direction to provide feedback. If they are not achieved then different decisions will have to be taken. The procedures/steps involved in ELO are:

- i) Establishing objectives;
- ii) Placing objectives in broad classification;
- iii) Defining objectives in behavioral terms;
- iv) Establishing situations in which attainment of objectives can be demonstrated;
- v) Choosing or developing appropriate evaluation tools/techniques;
- vi) Collecting data from the learner’s performance;
- vii) Comparing data with objectives;
- viii) Making a decision about the learner’s performance; and
- ix) Providing feedback

Here, evaluation of learning outcomes (ELO) is concerned with the systematic process of determining the extent to which the instructional objectives are achieved, and also with the provision of feedback to the learners.

1.2.2 Evaluation of Learning Systems (ELS)

Evaluation, as we have maintained, is the systematic process of collecting and analyzing data in order to make decisions. Further, it refers to the process of obtaining and providing descriptive and judgmental information about the worth and merit of a programmer’s goal, design, implementation and impact in

order to make informed decisions. This is otherwise known as decision-oriented evaluation.

The process of ELS involves the following steps:

- i) Conducting a formal or informal survey for the assessment of needs;
- ii) Defining the goals/objectives of the programme;
- iii) Identifying the clients involved in the programme;
- iv) Developing the programme materials, activities and administrative arrangements;
- v) Choosing appropriate evaluation tools or techniques; and
- vi) Collecting information related to the programme.

The basic difference between the two definitions i.e., ELO and ELS is the issue of making decisions in different situations by different persons involved in the system. In other words, we can say that ELO is a part of the daily affairs of a teacher or a learner and here we are concerned with the results or outcomes. But ELS is the concern of educational planners, administrators and researchers. ELS help in shaping, revising and replacing educational programmes to achieve better results. Let us now work out the exercise given below.

<p>Check Your Progress 1</p> <p><i>Notes: a) Space is given below for your answer. b) Check your answer with the one given at the end of the unit.</i></p> <p>Describe ELO and ELS.</p> <p>.....</p> <p>.....</p> <p>.....</p>

Let us now look at a few terms which are used synonymously but which have specific connotations.

1.3 DIFFERENCE BETWEEN MEASUREMENT, ASSESSMENT AND EVALUATION

Throughout the block you will come across terms such as ‘test’ ‘measurement’ and ‘assessment’ besides ‘evaluation’. Do these different terms mean one and the something? Very often they are assumed to do so and are used as though they are synonymous and interchangeable. But the fact is that they carry different functional meanings and as such, one cannot replace one with another without causing considerable damage to the sense conveyed. What follows is an attempt to discuss how these words are used in the field of education and training.

Let us not confuse the terms

Test is a device to obtain quantitative data. This consists of a standard set of questions to be answered or tasks to be performed. It is one among several devices (like holding interviews, sending questionnaires, assigning projects, rating scale, observation etc.) that can be used to measure the characteristics or traits present in an individual. It is the most commonly used form of measurement in education. A test usually presents a uniform set of tasks to all members of a given group at a scheduled time with due prior notice.

(Sometimes, ‘unannounced’ tests’ are possible and useful in classroom situations.)

Measurement is an act of assigning a numerical index (i.e. quantification) to what is being assessed in some meaningful and consistent manner. For example, Suresh scored 32 out of 50 in an English test. When we assign a score 32/50 to a given test performed by Suresh, we are performing an act of **measurement**. Measurement only qualifies the data obtained through observations, rating scale, tests or any other devices.

Assessment refers to the process of obtaining information about a learner’s learning, progress and achievement. That is, what and how well has the learner understood the content of a course? Upon completion of the course, a value is assigned to the performance. For example, Suresh got an ‘A’ grade or 75% in an assignment-response.

Evaluation is a wider and more inclusive term. This includes all the three: test, measurement and assessment. When we compare the score of a learner with those of other learners and judge whether it is good/average/satisfactory/unsatisfactory/bad, we are performing an act of evaluation. Here is an illustration. To say Suresh has scored 32 out of 50 in a test is a report of measurement. But, to say ‘Suresh is good in English’ is an instance of evaluation. To be more clear let us take another example. A typist types 50 words per minute. Here, 50 is a symbol by which his/her ability is being measured. When we say that he/she types better than other typists in the office, we evaluate his/her typing ability. So in the case of evaluation, we assign a value judgement to measurement.

Measurement answers ‘how much’ whereas evaluation ‘answers’ ‘how good’, or ‘how well’. Put differently, the latter adds meaning or value judgement to measurement. From what we have just now seen, we can note that evaluation includes three components. They are:

- 1) Quantitative description (e.g. Raman has scored 60 in Mathematics)
- 2) Qualitative description (e.g. Raman is able to solve mathematical problems systematically)
- 3) A value judgement (e.g. in view of the above facts, Raman is good in Mathematics).

In one sentence we can say that:

$$\begin{aligned}
 \text{Evaluation} &= \text{Quantitative description} \\
 &\quad (\text{Measurement: facts and figures}) \\
 &\quad + \\
 &\quad \text{Qualitative description} \\
 &\quad (\text{non-measurement: ranking, Weightage, value}) \\
 &\quad + \\
 &\quad \text{Value judgement.}
 \end{aligned}$$

The above discussion explains the comprehensive nature of evaluation and the role of measurement in the evaluation process. It goes beyond the simple quantitative description. Evaluation always includes value judgments concerning the desirability of the result.

Check Your Progress 2

Notes: (a) Tick (✓) in the appropriate box.

(b) Compare your answer with the one given at the end of this Unit.

Suppose after a three month course in typewriting two learners, say A & B, achieve a speed of 55 words per minute. However, when A joined the course, he had already achieved a speed of 45 words per minute, while B at the time of joining could type only 30 words per minute. Now which of the two terms - 'evaluation' and 'measurement' - will you use to describe the following statements about the achievement of the two learners?

	It is a statement of evaluation	It is a statement of measurement
a) The progress made by A is average	<input type="checkbox"/>	<input type="checkbox"/>
b) A has recorded a progress from 45 w.p.m. to 55 w.p.m.	<input type="checkbox"/>	<input type="checkbox"/>
c) The progress made by B is extraordinary	<input type="checkbox"/>	<input type="checkbox"/>
d) The performance of B has improved from 30 w.p.m. to 55 w.p.m.	<input type="checkbox"/>	<input type="checkbox"/>
e) At the end of the course both A & B performed well	<input type="checkbox"/>	<input type="checkbox"/>
f) At the beginning of the course B was a poor performer	<input type="checkbox"/>	<input type="checkbox"/>
g) At the end of the course, A & B performed at the rate of 55 w.p.m.	<input type="checkbox"/>	<input type="checkbox"/>

1.4 TYPES OF EVALUATION

In the previous sections we discussed evaluation as a process of assessing the worth of a product, a process or a programme. With reference to the processes, products and persons under consideration, different types of evaluation can be grouped as below:

- student evaluation
- institutional evaluation
- programme evaluation
- personnel evaluation.

The above four types should give us a global view of evaluation. But we can also state the types of evaluation according to functions, approaches and nature of reference because there is no one best way to classify evaluation. Every evaluation situation is unique. Evaluation needs to be situationally responsive, which is more helpful than a rigid orthodox form of evaluation. Based on functions, evaluation can be prognostic/diagnostic, according to approach, it may be formative or summative and with respect to the nature of reference, it may be criterion-referenced or norm-referenced evaluation. The above discussion provides us with a broad understanding of types of evaluation. Let us put all these into tabular form for a better understanding.

Table 1.1: Basic ways of classifying different types of evaluation

Types of evaluation	Function of the evaluation	Illustrative instruments
Placement	To Determine possession of prerequisite skills, degree of mastery of course	Reading tests; aptitude tests, pretests on course objectives; observational techniques.
Formative	Determine learning progress, provide feedback for reinforcement of learning and correct learning errors.	Teacher-made mastery tests, observational techniques.
Summative	Determine end-of-course achievement for assigning grades or certifying mastery of objectives	Teacher-made tests, performance rating scales; product scales.
Diagnostic	Determine causes (intellectual, emotional & environmental) of persistent learning difficulties	Published diagnostic tests, teacher-made diagnostic tests.
Criterion-referenced	Describe pupil performance in terms of a specified domain of instructionally relevant tasks	Teacher made mastery tests; observational techniques.
Norm-referenced	Describe pupil performance in terms of relative position in some known group	Standardised aptitude and achievement tests, teacher-made tests, interest inventories

We have already discussed above how one of the distinctive features of the evaluation process is the use of a wide variety of procedures. These may be described in many different ways, depending on the frame of reference used. We shall discuss here student, institutional and programme evaluation which will give us an overview of the subject.

1.4.1 Student Evaluation

In this case the evaluation process is addressed to each single student and to the group of students as a whole. The evaluation which concerns the individual student is based on information which defines his/her achievement, intelligence, personality, attitude, aptitude and interest. These traits can be measured with the help of individual teacher-made or standardised tests. This is otherwise known as *individual student evaluation*. The evaluation process which deals with the students as a whole has more or less the same purpose, but it concentrates on pointing out the difference between the subjects and the population. This is otherwise known as *group evaluation*.

The individual and group evaluation processes can function at three levels:

- i) Individual/group initial evaluation;
 - ii) Individual/group intermediate evaluation; and
 - iii) Final evaluation.
- i) Initial evaluation of an individual, or of a group, aims at evaluating the pupil entry behaviour in a sequence of instruction. This is also known as placement evaluation. For example, before the start of the proper course, the learners could be sorted out according to their abilities and placed in

a particular course. Placement evaluation is necessary for admission of students into a new course or programme. The initial evaluation can be based either on certificates, or on data resulting from objective tests or on information gathered in different ways. Collecting initial data has the purpose of starting the process of diagnostic evaluation. We find diagnostic evaluation in the case of technical education. Some institutions which want to programme their activity in a more constructive way, base their initial diagnostic evaluation on data especially obtained at the beginning of the year, by administering batteries of tests to the students. The results are defined as learning prerequisites. This has to be regarded as a useful tool in taking early decisions about the individualization of remedial work. The same situation arises in the case of distance education. In fact, it is advantageous to examine specific data obtained at the initial moment and to base diagnostic and prognostic evaluation thereon. In this case the educational decisions would be more reliable and more suitable to the individualization of the teacher activity. For example, before the beginning of the proper course, the students could be grouped according to their abilities and could be trained on the basis of specifically designed procedures to get the remedial work they actually need.

- ii) Intermediate evaluation aims at the evaluation of a student's learning progress during the period of his/her learning activity. When the teacher teaches in the class and gives the students some new ideas, the teacher tries to evaluate the learning outcomes, on the basis of which he/she modifies the methods and techniques of teaching to provide better learning experiences. This helps us to find out whether the student needs some instruction to supplement or to compensate for his/her weaknesses. In the context of distance education individual intermediate evaluation aims at establishing the progress of each student in acquiring the abilities representing the objectives of the single parts in to which the course is divided.

This evaluation is called formative evaluation when its purpose is to modify the educational proposals and to make them more relevant to the individual student's needs. When the evaluation of the learning activity is based on the formative approach, it must be as analytical as possible. Suppose a student shows some weakness and is not able to reach the intermediate goals as they have been established during the planning of the course, it is necessary to know exactly in which of the objectives is the student failing and what the causes of the failure are. So intermediate evaluation does not only diagnose the difficulties but also points out the mistakes made by the student. The main tool for individual evaluation is formative tests. These tests are structured measuring instruments with specifies answers. The evaluation of the learner's progress can be measured with the help of periodical questionnaires, if the course lasts for a long time, through observation when the student personally contacts the educational structure or through informal communication such as letters.

Formative evaluation is a tool for providing feedback to the teaching/learning process. This type of instruction motivates the teacher and the student and reinforces learning by providing feedback to both of them.

- iii) Final evaluation is done at the end of a course of instruction. It is the evaluation of the pupil's achievement at the end of instruction. This is also called **summative evaluation**. This helps a teacher to know how far the objectives have been accomplished and to what extent the instruction has been effective. Traditional university examinations are examples of summative evaluation. Teacher-made tests, standardised tests, rating scales are some of the widely used tools for summative evaluation. The individual

final evaluation is employed for assigning grades to students. Its chief functions are crediting and certifying the level of attainment of the pupil.

This is judgmental and terminal in character. (It is terminal in nature because it comes at the end of a course of instruction or a programme.) It views evaluation as a product. The chief concern of this type of evaluation is to point out the levels of attainment of students and to judge the efficacy of a programme or system and thereby guide us as to whether the programme or the system is to be accepted or rejected. Summative evaluation is concerned with the outcomes of learning or products of education.

Check Your Progress 3

Notes: a) Space is given below for your answer.

b) Check your answer with the one given at the end of this Unit.

a) Name the three levels of student evaluation.

- i)
- ii)
- iii)

b) Fill in the gaps choosing appropriate words from those given after each statement.

- i) Collecting initial data has the purpose of starting the process of evaluation. (Summative, diagnostic, placement, formative)
- ii)evaluation is concerned with the outcomes of learning. (Formative, placement, summative and diagnostic)

A closer look at the student evaluation in distance education in an open university

At this stage it will be useful to examine student evaluation in an Open University. For this purpose we take the case of IGNOU. In this university student evaluation takes place continuously during the course of the students studies. A distance learner while working through a course is expected to do the self assessment questions. He/she submits assignments and receives the tutor’s comments and grades/marks. All the programmes end with a formal examination. From this discussion you may note that the Open Universities generally have a three-tier system of evaluating learner performance. This consists of:

- 1) Self-assessment;
- 2) Assignments (internal assessment); and
- 3) Term-end examination (external assessment).

Let us discuss them in the given order.

Self-assessment

The first component of student assessment comprises in-text questions given in the *course units* which are self-instructional in nature. Students are expected to work on these in-text questions on their own and having worked on a question, look for reinforcement in the answers provided in the materials themselves. These are the questions or exercises which do not carry any weight for passing the examination. The responses to these questions are not to be sent to the university or to any study centre for evaluation. This

component is called '*self-assessment*'. In other words, we can say that the process of 'self-assessment' serves the purpose of *formative evaluation*.

Assessment through assignments

The second component of student assessment is assessment through assignments. Assignments constitute the continuous evaluation component of a course and they play an important role in the two-way communication between the distance tutor and the learner. The students work on prescribed assignments. Students send written responses to the assignment questions to evaluators-on-contract at the study centres/headquarters of the university. Assignments are usually of two types:

- Computer-Marked
- Tutor-Marked.

Computer Marked Assignments (CMA) consists of objective type questions. Two sample CMA questions are given below:

- 1) Among the following, who could be included in the category of 'business person'?
 - a) Chartered accountant
 - b) Doctor working in a hospital (physician)
 - c) Sales boy in a medicine (chemist) shop
 - d) Owner of a grocery shop.
- 2) An example of an audio-visual medium of advertising is:
 - i) Picture card
 - ii) Poster
 - iii) Film show
 - iv) Radio

Students choose the correct answer and write/mark the number/alphabet against the correct answer in the box provided. Alternatively, they put a tick mark or darken the number/alphabet as the case may be.

Similarly, if a learner does not want to answer any question, he/she can put a (X) in that box. After completing the assignments, and filling in the response sheet, the students are required to mail it to the headquarters.

The tutor-marked assignments (TMA) demand written responses in the form of either essay type questions or short-answer questions or both. The learners, after going through the unit(s)/block(s) on which assignments are based, write the responses. Assignment-responses, as mentioned above, are sent to the coordinator of the study centre allotted to the student. It is compulsory for students to attempt the assignments. They will not be allowed to appear for the term-end examination of a course if they do not submit the specified number of assignments in time for that course. We should note here that for calculating the overall scores, scores of TMA or CMA or both, where mandatory, are put together.

Evaluation through assignments serves the purpose of *formative evaluation* and also the purpose of *summative evaluation* as the grades/marks scored in assignments constitute a component of the overall score a student gets in a course. This constitutes "*continuous assessment*".

Term-End Examination

The third component of student assessment is based on the term-end examination, which in most cases is a conventional three-hour written examination. The term-end examination for various courses/programmes is ordinarily held in the months of June and December every year. Students are free to appear at any of these examinations (June/December) either for specific courses or for a whole programme provided that they complete the minimum period of study and the required assignments. This component serves the purpose of *summative evaluation*.

Grading

Grading involves expressing a distance learner’s achievement/ performance in relation to a pre-specified criterion rather than in relation to the achievement of others enrolled in the programme. A learner who fulfills a certain criteria in every required task is said to have successfully completed the required tasks and so is awarded a grade/mark. The rest are considered unsuccessful.

In the computation of the overall score in a course, the weight assigned to continuous assessment may be between 25% and 30% of the total score and correspondingly the weight assigned to the term-end examination may be between 75% and 70% of the overall score. To complete a course successfully a student is expected to get at least a pass grade in both the continuous assessment and the term-end examination. The Open University follows a letter grading system on a 5 point scale (A, B, C, D and E). So the levels of performance, both in continuous evaluation as well as at the term-end examination of all programmes (degree/diploma and certificate) are indicated in letter grades (A, B, C, D and E).

The qualitative levels and grade points corresponding to various letter grades are shown in the following table:

Table 1.2: Qualitative values of letter grades and their equivalent grade points of Diploma and Certificate programmes

Letter	Qualitative Level	Grade Point
A	Excellent	5
B	Very good	4
C	Good	3
D	Satisfactory	2
E	Unsatisfactory	1

Check Your Progress 4

Notes: a) Please write the answer in the given space below.
 b) Check your answer, with the one given at the end of this unit.

Explain the grading system of IGNOU in about 20 words.

.....

.....

.....

.....

.....

1.4.2 Institutional Evaluation

Every teaching-learning situation is different. It follows that every evaluation will be different too, as it must be tailored to meet the needs of individuals (both teachers and learners), of groups and of institutions. Many teachers are employed by large institutions and may be unable or unwilling to evaluate their own particular areas of work in isolation. An evaluation of the whole institution may be called for. Evaluation of an institution indicates some of the aspects of an institution which could be usefully evaluated and emphasises the need for effective control of the procedure of evaluation through a widely representative evaluation steering group.

It can be very beneficial to evaluate an institution in terms of its management, administration/ancillary services and the general environment. Great care must be taken to ensure that all interest-areas/groups are properly represented, unless everyone involved feels he/she has the opportunity to provide his/her opinions and concerns and contribute to decisions, the evaluation is most unlikely to be worthwhile. Much of the evaluation of an institution will centre around the work of teachers and the educational service they deliver. It can be carried out by small groups of staff. It is possible for each small group to facilitate decision making and to oversee the day to day processes.

But when an institution is to be evaluated, the process goes far beyond the examination of individual courses or programmes within it. All educational institutions may have existing data collection systems (often referred to as Management Information Systems). Many institutions are now adopting quality assurance systems including sets of questionnaires seeking students and sometimes employers' perceptions of courses. An evaluation steering group must take into account these existing systems and decide how to incorporate them into its own work to avoid duplication. It also has to examine the limitations of these systems and so avoid being restricted by them.

From the above discussion it is clear that institutional evaluation can be of two types:

- i) System evaluation
- ii) Course evaluation

System evaluation

System evaluation involves the evaluation of any instructional programme or instruction materials and includes evaluation of such factors as instructional strategies, textbooks, audio-visual material and physical and organisational arrangements. How many courses have been produced? How many students are there? How many applicants had to be turned away? etc.

This data can be drawn from administrative records and presented regularly, often in the form of an annual report or a 'Statistical Digest' in a system. In addition to measurements of activity come those of efficiency. How many students have successfully completed the courses? What amount of workload do they attempt? This data may come from administrative records and be produced as a part of regular monitoring procedures. So system evaluation has often moved beyond the descriptive to the examination of patterns and causes. A new programme is usually considered to be cost effective/efficient if one of the following is true:

- i) it costs essentially the same as other programmes but results in a greater achievement.
- ii) it costs less and results in an equal or a greater achievement.

- ii) it costs more but results in a significantly greater achievement. Unless the difference is minimal, anything that costs more usually must be demonstrated to be practically better.

Course evaluation

The second major strand of institutional evaluation is ‘course evaluation’. The aim of this is to improve the quality and effectiveness of the teaching and learning that takes place. The evaluation of a course or teaching materials may seek to provide information that can be used during the process of developing a course or preparing materials—these are **formative** evaluation procedures. But when we seek to provide information about how well the ‘finished’ instruction has worked in normal use—we use what are called **summative** evaluation procedures. Summative evaluation procedures of a course provide feedback from tutors and students. For example, tutors can give their own reactions to the teaching materials, and also accounts of the problems their students have encountered in their studies and assignments. The experience of tutors in making the course work can provide particularly useful information for subsequent modifications to or adoptions of the teaching materials and instructional arrangements. Feedback is gathered from conventional students i.e. those in the conventional system of education while they are in the classroom and responding to a teacher’s questions. In the case of distance teaching, students’ feedback is collected while they are taking a course or shortly after its completion. The students, feedback from one presentation in a course helps to determine revisions for subsequent presentations. The information can be collected through mail questionnaires.

Check Your Progress 5

Notes: a) Space is given below for your answer.

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

A new programme is usually considered to be cost effective/efficient, if it satisfies certain criteria. Please state the three requirements in this regard.

- i)
- ii)
- iii)

1.4.3 Programme Evaluation

You may be aware that a programme or course evaluation starts with needs assessment besides gathering information regarding its marketability, utility, economic viability, adequacy and appropriateness of its content and media components. We shall here elaborate on the whole process of programme/course evaluation. Institutions normally initiate some evaluation activities when launching new programmes. These include the need assessment of a programme on the basis of social demands, marketability, i.e., whether the programme is attracting sufficient number of students, cost-effectiveness of the programme, etc. According to the needs of the society and cost-effectiveness of a course/programme the utility of a programme in a country is also considered. For determining the adequacy and appropriateness of the content and media components of a programme, a few criteria commonly used at distance learning institutes are:

- What is the level of content-density?
- Is the language used appropriate to the level concerned?
- Is the material adequately self-instructional?

- Is the media utilisation pedagogically rational?
- Is the material socially relevant?
- Is the material easily accessible? etc.

Essentially, programme/course evaluation at Open Universities is a two tier operation. The first tier consists of those elements of evaluation which are conducted before launching a programme/course. For example, the need for a course and the rationale behind the outline of a particular course are looked into by an expert committee. The modifications brought in at this stage are again discussed and reviewed with the course writers. In the process of writing a course the materials get vetted by a programme/course editor, a language editor and a unit designer. The second tier of evaluation in the present context involves the piloting of programmes/courses. This process involves a trial of materials with the first batch of students, and revisions are brought in subsequently.

Programme evaluation comprises three components—evaluation of the planning of a programme/course, evaluation of materials that result from the plan and evaluation of the support services after the materials/courses have been launched.

i) **Evaluation of planning a programme**

This activity consists of evaluating a programme/course in terms of the need for it, its marketability, its utility, its economic viability, adequacy and appropriateness of its content and media components. For example, suppose we plan to study the economic viability of a programme or course. For this, various criteria are used to indicate how much is to be spent on preparing a course and what might be the returns. We have to see how much money needs to be spent on the various operations pertaining to a particular course such as cost of expert committee meetings, orientation programmes for course writers, paper and printing, audio and video materials, support services, and the cost of learning as far as the student is concerned. These cost-factors help in estimating whether certain courses are cheaper than others, and thus in establishing their relative cost-effectiveness. Obviously, such evaluation will yield very useful inputs for planning and decision making in an educational system.

ii) **Evaluation of materials**

Evaluation of materials can be conducted either during the actual process of developing them or after they have been developed, as a continuous evaluation. We may consider a few criteria while evaluating materials. They are content adequacy, language, media utilisation, social relevance etc. Continuous evaluation of materials can be done mainly by giving precise instructions to the authors, supervising them continually, evaluating pilot studies, releasing the finished materials, certification, etc. The most important advantage of continuous evaluation/formative evaluation is that it stands for the general possibility for improving the study material (Koul, 1991, p. 95)

iii) **Evaluation of student support services**

Evaluation of student support services is done to improve the quality of services, to allow managers/educators/tutors to take decisions about expansion and reduction of services, to share information about good practices and failures with a wider audience. This evaluation is a consideration of an aggregate of:

- tutor evaluation;
- evaluation of face-to-face session, counselling sessions;

- evaluation of continuous assessment, and
- evaluation of support system in general.

Tutor evaluation: This evaluation consists of assessing the nature of communication or interaction between the tutors and the students through letters or in face to face situations, the quality of their comments on assignment-responses, the reliability and validity of the assessment of assignment-responses and the turn around rate of assessed assignment responses.

In support services tutors/academic counsellors are essentially engaged broadly in four activities, which are:

- to inform, advise and counsel learners;
- to meet learners in face-to-face situations for a number of sessions during an academic year;
- to assess assignment-responses;
- to help learners to learn how they should learn independently.

These four activities are the bases of evaluating the students. This evaluation consists in gauging:

- the nature of communication/interaction between the counsellors and students. For example how far effective interaction was possible: through letters or in face-to-face counselling or telephone counselling or through teleconference or through some other medium
- the quality of tutor comments on assignment-responses;
- the reliability, validity and objectivity of the assessment of assignment-responses; and
- the turn around rate of assessed assignment responses.

Evaluation of face-to-face counselling sessions: Learners often need help and advice on matters that have nothing to do with the subject matter they are learning about. Sometimes he/she may need help in getting started on a course, organizing his/her time, coping with self-doubt, and deciding on the next step after completing a course/programme. We evaluate an academic-counsellor's punctuality, regularity, nature of rapport achieved with the students, quality of the conduct of sessions, students' satisfaction and tutors' motivation. This can be measured from the administration records maintained in study centres and evaluation divisions.

Evaluation of continuous assessment: Evaluation of continuous assessment consists of evaluating the validity and reliability of continuous assessment. This refers to the process of evaluation of assignments for their validity and reliability and for their correlation with the questions set in the end of term examination. Student evaluation takes place continuously during their studies. Distance students submit their assignment responses and receive feedback from their tutors in terms of specific comments, corrections, overall comments and a formal grade.

Evaluation of support system: Lastly, the evaluation of the support system itself involves evaluating the quality and quantity of support available to students in relation to various courses at various study centres. Such evaluation will have implications for the recruitment of academic-counsellors, providing support equipment, local and socio-geographical constraints and the corresponding support.

1.4.4 Personnel Evaluation

Evaluation of personnel includes evaluation of all persons responsible, either directly or indirectly, for educational outcomes. ‘Personnel’ includes not only teachers but also other groups such as counsellors and administrators. Personnel evaluation is generally based on the observation of the teacher/tutor in the classroom or face-to-face contact sessions by the head of institution/administrator/coordinator and completion of a rating form by a head or an administrator or a coordinator. In some cases the teacher may be asked to complete a self-report rating form or students may be requested to rate their teacher on a number of factors. The validity of the observation approach, as typically used, is sometimes questionable on a number of dimensions. For example, the number of observations made per teacher is very small and therefore a very small sample of behaviour is observed. Sometimes people have a tendency to act differently than they usually do just because they are being observed: teachers may perform better/may feel nervous or perform poorly. So there is rarely any evidence regarding the validity and reliability of personnel evaluation if a particular method or tool such as observation is employed. From the above discussion, we can say that it is very difficult to determine what types of behaviour are to be evaluated. The solution to the personnel evaluation problem, at least for the present, involves collecting the best data possible, from as many sources as possible.

Check Your Progress 6

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

- a) What are the three components of programme evaluation?
 - i)
 - ii)
 - iii)
- b) State any three criteria for evaluating instructional materials.
 - i)
 - ii)
 - iii)
- c) How is continuous assessment carried out in distance teaching systems?
 - i)
 - ii)
 - iii)

1.5 PURPOSES AND FUNCTIONS OF CURRICULUM EVALUATION

Evaluation plays a key role in education. It helps to know the efficacy of different educational programmes. Through evaluation, defects and deficiencies can be identified and appropriate plans of action can be formulated. However, we may have to identify a number of specific purposes and the related functions of evaluation to make it meaningful. We have given below the most common purposes for which evaluation is used within different educational systems.

Prediction: This is the purpose served when evaluation helps us discover potential abilities and aptitudes among the students. In a secondary/high school class or public examination, one has to decide whether or not one examination often forms the basis to judge future courses of study. In higher education evaluation often forms a basis for students to continue with their chosen course of study or to find employment. Evaluation results are used as an important factor for selection for employment and for entry to higher education. In technical and commercial training, success at one level opens the possibility of training at a higher level. In all of the above cases, evaluation is used to predict future potential and it helps to assess the future performance of the student to select the right electives.

Diagnostic: The purpose of evaluation is to help us identify the learning difficulties experienced by individuals or groups. In classroom situations teachers constantly attempt to identify the weaknesses/lapses in learning. In distance education the students are not physically present in the educational situation and the study materials have been planned and carried out in advance. The collective initial evaluation during the planning and carrying out of a course, or at its beginning, is to set a diagnostic evaluation to find out the possible difficulties in the future. This might help us in producing suitable materials for a given group of learners.

Selection: This will be the purpose of evaluation when it helps us select suitable persons for a course (or career). The entrance tests to different courses are devised with this purpose in view.

Grading: This purpose is served when evaluation helps us rank the learners of a given group. Usually the term-end examination of a course serves this purpose.

Guidance: This is the purpose of evaluation when it assists a person in making decisions about courses and careers. The purpose of guidance is served when evaluation enables a learner to know his/her pace of learning or lapses made while learning. The self assessment exercises in distance education materials are meant to serve this purpose.

Decision-making: Evaluation of a course/programme helps in making decisions about the 'worth' of a course/programme. The results of programme evaluation are used to continue or discontinue a course/programme.

Feedback: Evaluation results provide feedback to students and educational programmes in order to bring about an improvement in the system.

Check Your Progress 7

Notes: a) Space is given below for your answer.
b) Compare your answer with the one given at the end of this Unit.

- 1) Fill in the blanks with appropriate words.
 - a) helps to discover the potential abilities and aptitudes of students.
 - b) The purpose of evaluation is to identify the learning difficulties experienced by individuals.
- 2) State the guidance function of evaluation.

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1.6 LET US SUM UP

In this unit, we have discussed the types, purposes and functions of curriculum evaluation. We have stated that

- Curriculum evaluation can be defined as the systematic process of determining the extent to which the specified instructional objectives previously identified and defined have been achieved.
- There are four types of curriculum evaluation with reference to processes, products and programmes. They are student evaluation, institutional evaluation, programme evaluation and personnel evaluation.

Student evaluation: the process of obtaining and providing information for making decisions and judgments about a pupil's performance.

Institutional evaluation: the process of delineating and obtaining information useful for making decisions about the instructional programmes of an institution.

Programme evaluation: the process of the collection and use of information to make decisions about an educational programme.

Evaluation of personnel: evaluation of all persons responsible, either directly or indirectly, for educational administration (counsellors, teachers and so on).

In terms of student performance, we have said that the purpose of evaluation is to determine the current status (grading) of a student's performance, to compare that status with a set of standards for selection, to predict the potential of the studies, to identify the weaknesses and lapses in learning, to suggest any possible improvements after obtaining the feedback and to select an alternative among two or more to make a decision.

1.7 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1

- a) Evaluation of learning outcomes is the systematic process determining the extent to which the specified instructional objectives previously identified and defined have been achieved.
- b) Evaluation of learning systems is the process of collecting and analysing data in order to make decisions about the worth of a programme and its subsystems.

Check Your Progress 2

Evaluation a) c) e) f)

Measurement b) d) g)

Check Your Progress 3

- a) i) individual/group initial evaluation
ii) individual/group intermediate evaluation
iii) final evaluation
- b) i) diagnostic
ii) summative

Check Your Progress 4

Grading involves expressing a learners achievement or performance in relation to a pre-specified criteria. Open Universities like IGNOU generally follow a letter grading on a 5-point scale (A,B,C,D and E) for diploma and degree courses.

Check Your Progress 5

- i) It costs essentially the same as other programmes but results in greater achievement.
- ii) It costs less and results in equal or greater achievements, unless the difference is minimal.
 - iii) It costs more but results in significantly greater achievement.

Check Your Progress 6

- a)
 - i) Evaluation of the planning of a programme/course.
 - ii) Course materials.
 - iii) Student Services
- b)
 - i) Content adequacy
 - ii) Language
 - iii) Media utilisation
- c) Continuous evaluation takes place in distance teaching systems through assignments. Distance learners submit their assignment responses to the study centre which are sent for tutor comments. The tutor provides feedback and awards a grade to each assignment-response.

Check Your Progress 7

- i)
 - a) Predictive
 - b) Diagnostic
- ii) The purpose of guidance evaluation is to assist people in making decisions about the courses and careers available to them.