
UNIT 13 MEANING AND CONCEPT OF CURRICULUM

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13.1 INTRODUCTION

In Blocks one, two and three, we provided you a detailed understanding of the concept, nature, character and aims of education. Education of human beings, as all we know

by now, takes place in both natural and contrived environments. Although the learner is the key player in any kind of learning environment, the role of both the learner and the teacher assumes greater significance in a contrived environment. In contrived environments, the interaction between the learner and the teacher does not take place in a vacuum. Rather, both the actors in the educational process mediate their interaction with the help of certain pre-decided learning experiences or learning substances. This learning substance is usually the third dimension of any kind of teaching-learning process and in pedagogic terms, is called curriculum. In this unit, we will study about the concept of curriculum, its purpose and how it affects students and teachers. Since this is the first unit of the Block, the concepts discussed herein will set the stage for discussions that follow on foundations of curriculum, its planning, development and evaluation.

We have tried to define curriculum, in many ways. Most definitions fall into four categories as described in the unit. The different approaches to curriculum, which reflect a person's viewpoint encompassing the foundations of curriculum, have been discussed. We have provided the Indian perspective to curriculum. A curriculum, in order to be purposeful must be essentially indigenous. It should follow certain basics of relevance, coherence, equity and excellence. Further, we elaborate the curricular structure. The unit also emphasizes the role of various representative groups in ensuring a socially relevant curriculum. The significance of in-built monitoring and feedback mechanism for the curriculum system has been emphasized.

Hence, in this unit you will gain an understanding of the different interpretations of curriculum, its genesis and growth, and the underlying processes and criteria that facilitate curriculum changes. You will understand the role of curriculum in making education more purposeful and geared to meet ever-changing societal needs, and also to achieve the objectives of teaching – learning.

13.2 OBJECTIVES

After going through this unit, you should be able to:

- define 'curriculum';
- explain the different interpretations of the concept of curriculum;
- describe the various approaches to curriculum and differentiate between them;
- describe the emergence of curriculum as a field of study by tracing its genesis and growth;
- explain the curricular processes and criteria;
- illustrate the role of curriculum in effective teaching and learning; and
- explain the process of curriculum change and its implementation.

13.3 MEANING OF CURRICULUM

Curriculum is a familiar word, which we come across in the context of school, college or university system. All of us also have some idea of curriculum; though it may not be exactly what a curriculum means. To many of us, curriculum means one or more of the following:

1. Curriculum is the list of contents taught to the students.
2. Curriculum is a set of subjects.
3. Curriculum is the syllabi followed in a school or a college.
4. Curriculum is the programme of school or college activities.
5. Curriculum is a set of study materials.

6. Curriculum includes both curricular and extra curricular activities organized in a school or college.
7. Curriculum comprises all those experiences a learner receives in a school or in a college.

From the above statements, one can view curriculum both in a narrow way (list of contents) and in a broad way (all the experiences received by a learner). Let us examine our perceptions of curriculum in the light of some definitions given by professional educators.

13.3.1 Definition

A curriculum can be called a plan for learning, which contains assumptions about the purpose of education in our society. It also has a definite structure through which the vision of the planners can be translated into learning experiences for the learner. Hence any curriculum comprises two major dimensions: a vision and a structure (Wiles and Bondi, 1988).

The Latin meaning of the term 'curriculum' is a racecourse used by chariots. Hence it is any path or course of study to be undertaken by an educational institution, to be covered in a specified timeframe. The course of events can take place inside the school and also outside it. A curriculum would consist of several events like plan for learning, study periods, sports activities, cultural events, etc. Hence defining curriculum as 'course of events' would be a very simplistic understanding of the term. One would need to elaborate, 'which course of events'.

Let us examine some of the definitions of curriculum as given by the experts. In the Dictionary of Education, Carter V. Good describes curriculum as "a systematic group of courses or sequences of subjects required for graduation or certification in a major field of study, for example, social studies curriculum, and physical education curriculum....". According to Wiles and Bondi (1988), "a curriculum can be called a plan for learning, which contains assumptions about the purpose of education in our society. It also has a definite structure through which the vision of the planners can be translated into learning experiences for the learner. Hence any curriculum comprises two major dimensions: a vision and a structure". But, Tanner and Tanner (1980) define, "Curriculum is the reconstruction of knowledge and experience systematically developed under the auspices of the school (or university), to enable the learner to increase his or her control of knowledge and experience". Doll (1986), defined the curriculum of a school as the formal and informal content and process by which learners gain knowledge and understanding, develop skills, and alter attitudes, appreciations, and values under the auspices of that school.

Let us look at the Sanskrit equivalent of the term 'curriculum'. It is 'pathyakram'. Dewal (2004), has explained the term to mean the sequence of course of study including the content and its processes. According to Dewal (2004), 'pathyakram encompasses the content, its processes, a sequence of study pertinent to the stage of education'. The word 'path' in his opinion has a similar meaning to the words 'vidya' and 'shiksha'. The Sanskrit meaning of the term curriculum in Dewal's opinion would imply the following:

- i) a course of study
- ii) a sequence of the course depending on the stage of education.
- iii) the content and processes arranged in a definite hierarchy
- iv) the sequence of study begins with process of understanding, to acquire and to think or to reflect.

Several definitions of curriculum have been proposed by curriculum specialists. Beane et. al. (1986) have grouped most of these definitions under the following four categories:

- (1) Curriculum as a product
- (2) Curriculum as a programme
- (3) Curriculum as intended learning outcomes
- (4) Curriculum as planned learner experiences

We shall briefly describe them here.

13.3.2 Curriculum as a Product

The definition of curriculum as a product derives from the idea that the school or university prepares a document which would consist of a list of courses and syllabi of those courses. These documents are the results of curriculum planning and development. For example, we have History, Economics, English, Physics syllabi in schools and colleges. Such a definition imparts a concrete meaning to the term curriculum. It describes the course of events to be followed in the schools and colleges. Such a definition has two disadvantages:

- i) The notion of curriculum is confined to a specific programme of study as described in the document.
- ii) The underlying presumption of such a definition is that all possible events can be described in the document.

This is one notion of curriculum. Let us discuss the next interpretation of curriculum.

13.3.3 Curriculum as a Programme

Another definition of curriculum is in reference to the entire learning programme of the school or college. In its narrowest sense a curriculum refers to the courses of study offered by the school. It could also mean a student's choice of courses within a given program of the school. Such a definition of curriculum is most widely accepted by schools. However, there is another broader interpretation of this definition. If the purpose of the school or college is learning and curriculum is the means of achieving that purpose, then curriculum will denote sources of learning other than just the courses the study. For example, learning takes place through activities like cultural events, sports activities, in the cafeteria, in the bus, in the principal's office, etc. Such a definition of curriculum as a programme, believes that curriculum can be described in concrete terms and that learning occurs in several school settings apart from the prescribed course of study.

13.3.4 Curriculum as Intended Learning Outcomes (ILOs)

A third interpretation of curriculum definitions refers to the learning outcomes, which are intended for the learners. In other words, curriculum could be defined as 'what is to be learned'. This definition of curriculum clearly demarcates what is to be learned from and how it is to be learned. The question of why something is to be learned is not considered. Curriculum in this context refers to knowledge of content, skills, attitudes and behaviour that students are supposed to learn in school or college. Learners go through planned learning experiences by interacting with their peer group and teachers in the school environment in general. However, proponents of this definition believe that such sources of learning then characterize "instruction". There is considerable debate over the meaning of the terms 'curriculum' and 'instruction'. Some curriculum designers see a distinct difference between what and how of learning. Their definition limits the idea of curriculum to the former. Curriculum as intended learning outcomes prescribes the result of instruction and not the means, i.e. the activities, material even the instructional content. The advantages of this definition are:

- i) Outcome is directly linked to the objectives, and

- ii) The basic plans of learning and its implementation or transaction are kept as distinct entities.

The disadvantage of this definition is that it does not take a comprehensive view of learning. The what and how of learning are treated separately and this leads to fragmented planning.

13.3.5 Curriculum as Planned Learning Experiences

The three definitions of curriculum discussed above have in common the idea that curriculum is something which is planned prior to the teaching – learning situations. The fourth category of definitions differs from the above as it refers to curriculum as experiences of the learners which is an outcome of the planned situations. The proponents of this group firmly believe that what happens is not always in accordance with what was planned. Hence the above definitions, in their opinion, constitute only the curriculum plans, whereas the actual curriculum is the learning that occurs in the students after going through different experiences. In their opinion the outcomes of the planned situations of the course contents are more important than the course content itself. In other words, learning experiences must be well planned. A curriculum should include as analysis of the student's learning experiences. To illustrate this definition, imagine that a teacher conducts a monthly project activity, with the goal of fostering team spirit and cooperation among the members. However, every month the teacher assigns poor grades to the shy and quiet members and high grades to the bold, talkative, and dominating members. As a result the former group would gradually get demotivated and resist any such activity. They will also learn that it is the high grades that matter and will not be able to include the intended qualities of team spirit and cooperation. Hence the course of events, which emerges, is different from what was intended. The advantages of this definition are:

- i) It is learner-centric and focuses more on learning than teaching.
- ii) It imparts a complex and comprehensive meaning to the term 'curriculum'.

13.3.6 Implications

We have discussed four different viewpoints or interpretations of curriculums. An analysis of the definitions of curriculum place it on two types of continuum-one ranging from the concrete to the abstract and the other ranging from a school-centred focus to a learner centred focus. This is shown in Fig. 14.1

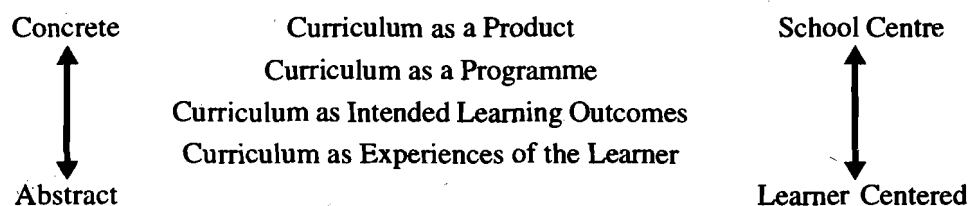


Fig. 13.1: Definitions of Curriculum Ranging from Abstract to Concrete and from School-centered to Learner-centered.

(Source: Beane et. al., 1986).

The abstract and learner centred view of the curriculum may be more desirable to some curricularists, but is definitely more difficult to describe. Apart from the ones categorised above, there are many more definitions of curriculum. So it is difficult to arrive at one absolute definition of the term curriculum. The meaning of curriculum also varies depending on the purpose for which it is used.

Before we proceed further, let us try to answer the following questions:

Check Your Progress

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

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

1. What are the four categories of definitions of curriculum?

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2. What are the advantages of accepting the definition of curriculum as a programme of studies?

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13.4 CURRICULUM AS A FIELD OF STUDY

Curriculum like any other fields of study adopts and borrows contents from several pure and applied skills, principles, etc. from other disciplinary areas. Hence, it has a multidisciplinary perspective. Curricular contents for a specific programme or a course of study are decided taking into account disciplines of sociology, psychology and different subject areas like history, geography, physics, chemistry and life sciences. The knowledge of curriculum organization is derived from management and organizational theories. Systems theory, technology and communication theory help in designing and developing curriculum. Philosophy, Psychology and Sociology help in determining the objectives and the nature of a curriculum. For example, a child centred curriculum borrows concepts like learning, growth and development, personality, motivation from Psychology, Biology, and Philosophical thought of progressivism. Thus, it can be concluded that curriculum as a field of study deals with a body of knowledge and skills derived from several disciplines. The figure 13.2 depicts the various sources of the curriculum field.

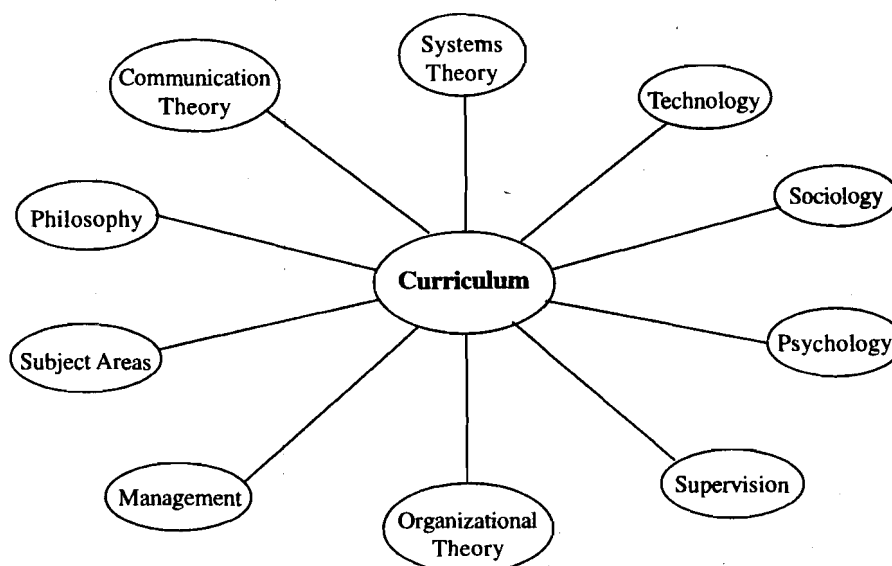


Fig. 13.2 : Sources of the Curriculum Field.

(Source : Oliva (1988.))

13.5 CLASSIFICATION OF CURRICULUM

Curriculum can broadly be classified into three main categories. These are:

- i) Overt or Explicit Curriculum
- ii) Hidden or Implicit Curriculum
- iii) Null Curriculum

Let us understand each of these categories.

Overt Curriculum

Overt curriculum or explicit curriculum is the intended curriculum. This includes all those experiences, curricular and co-curricular, which are intentionally planned by the school, college or university organization to be provided to the learners. It consists of knowledge, skills, attitudes and values, which are overtly provided to the learners. Overt curriculum is designed keeping into account the goals and objectives of the education and system and is evaluated in terms of these intended goals and objectives.

Hidden Curriculum

Hidden Curriculum is unintended or unnoticed curriculum. School, college or university organization does not consciously plan and design such curriculum. Therefore, it is unintended curriculum. But curricular inputs are implicitly provided to the learner by the organization through various means. Students learn a lot from the social environment of the classroom and the school. A teacher during his course of interaction with students provides instructional inputs, which might not be planned and designed by her earlier. Through various non-verbal behaviour like gestures and postures, eye contact, appreciation of student behaviour by nodding, the teacher conveys many things. A teacher praises a group of students who are sincere in their academic study and ignores those who are not. A hidden curriculum also includes the value system of the school and its teachers. Hence, a hidden curriculum is as important as the overt curriculum. Educational institutions like school or college must be very conscious of the implicit curricular inputs imparted to the students.

Null Curriculum

Eisner (1979) coined the term "Null Curriculum". It refers to the curriculum, which is not taught. This means curricular matters are not consciously but are taught by our silence. A curriculum of social studies generally includes history, geography and civics, but not anthropology, economics, sociology and psychology. But the latter subject areas are silently taught to the students through the social studies curriculum. Hence, the latter subject areas comprise null curriculum.

13.6 APPROACHES TO CURRICULUM

A clear understanding of any kind of curriculum depends on the approach the designers of curriculum have adopted. The approach to curriculum provides the broad perspective, orientation or position a particular curriculum is based on. This broad perspective offers a practitioner to examine the minute nuances, which have been built into the curriculum. Very often this broad perspective is based on different theoretical positions pertaining to how educational discourses in a school or college situation have to be designed, developed and implemented. Our intention here is to explicate some of these theoretical positions which have influenced the concept and the process of curriculum. Before doing this, let us have a wider understanding of what a curriculum approach is about. Ornstein and Hunkins (1988) have provided the following features of curriculum approach:

- A curriculum approach reflects a holistic position, or a metaorientation, encompassing the foundations of curriculum, domain of curriculum, and the theoretical and practical principles of curriculum.
- It expresses a viewpoint about the development and design of curriculum, the role of the learner, teacher and curriculum specialist in planning curriculum, and the important issues that need to be examined.
- Curriculum approaches can be technical, scientific or non technical – non scientific. A technical – scientific relates to traditional theories and models of education, and is based on established and formal methods of schooling. On the contrary, a non-technical – non-scientific approach challenges established and formalized practices of expressing the concern of experimental philosophies and politics of education.

Although one can find different approaches to curriculum put forth by different authors, in our discussion, we shall touch upon five approaches presented by Ornstein and Hunkins (1988). These are discussed in the coming sections.

13.6.1 Behavioural – Rational Approach

As the name suggests, the behavioural – rational approach is based on a logical – scientific perspective, which emerged out of research in behavioural sciences and dominated the thinking domain in most part of the early twentieth century. This approach is otherwise known as logical positivist, conceptual, empiricist, and experimentalist, rational – scientific and technocratic. The protagonists of this approach believe that curriculum making is a sequential and structured activity. As they emphasize, any kind of activity is to start with goals and objectives, sequencing of content or learning experiences based on goals and objectives, and content and evaluation of learning outcomes (student achievement/performance) based on objectives, content and transaction of learning experiences.

Curriculum makers are more concerned with technical issues of development and design although philosophical issues are important, provided they have any bearing on the design and development process of the curriculum. Although textbook writing is greatly influenced by this approach, of late, there are other competing philosophies and learning theories, which are impacting on the curriculum making process.

13.6.2 Systems – Managerial Approach

The predominant theory influencing this approach is systems theory. According to this theory, the school is perceived as a social system. There are various components of a school system. These components interact among themselves to achieve the intended objectives formulated by the school system. These components are teacher, student, curriculum specialist and others who interact with them according to certain norms and standards. Curricularists who rely on this approach plan the curriculum in an organized way and in terms of programmes, schedules, space, materials, equipment, personnel and resources. This approach advocates, among other things, selecting, organizing and supervising people involved in curriculum decisions. Consideration is given to committee and group processes, communication processes, leadership, methods and strategies, human relations and decision making (Ornstein and Hunkins, 1988).

This approach, which originated out of the school organization and administrative models of the 1920s and 1930s, became a popular curriculum model for the curriculum makers during the 1950s and 1960s. The focus of this approach, unlike behavioural-rational, is not on the objectives, contents and evaluation of learning experiences, but on the management and improvement of the school system based on policies, plans

and people. It embodies both managerial and systems perspectives in curriculum design and development.

While the managerial perspective refers to organization of people and policies, the systems perspective looks at three major components i.e. engineering, stages and structures. Engineering constitutes those processes through which engineers like principals, directors, superintendents and coordinators plan the curriculum. Stages refer to development, design implementation and evaluation. Structure constitutes subjects, courses, units and lessons.

13.6.3 Intellectual – Academic Approach

The intellectual – academic approach, as the name suggests, takes an analytical and synthesizing perspective to major positions, trends and concepts of curriculum. It looks at schooling and education from a broader perspective and discusses education from a historical and philosophical angle. This approach had its genesis in the intellectual work of John Dewey, Henry Morrison and Boyd Bode and became a popular approach during the 1930s and 1950s. "The influx of new topics related to curriculum during this period expanded the boundaries of the field to include a good number of trends and issues, and the integration of various instructions, teaching, learning, guidance, evaluation, supervision and administrative procedures" (Ornstein and Hunkins, 1988). After the 1950s the focus of the curriculum makers shifted from this approach to the structure of disciplines and qualitative methods. Still this approach is favoured by those who are interested in looking at curriculum from a broader philosophical and intellectual perspective.

13.6.4 Humanistic – Aesthetic Approach

As opposed to the behavioural – rational approach, this approach emphasizes the uniqueness of each child and the curriculum has to be designed and developed based on the needs, interests, and ability of children. It lays stress on self – actualization and self reflectiveness of the learners. Originating in humanistic theories of learning, this approach considers the whole child, not the cognitive dimension alone. This approach brought in the radical reform movement in the 1970s. "From this movement, a host of curriculum strategies emerged, mainly at the elementary school level, including lessons based on life experiences, group games, group projects, dramatizations, fields trips, social enterprises, interest centres, and child and adolescent needs". (Ornstein and Hunkins, 1988). Cooperative and collaborative learning, independent learning, small group, learning are some of the curricular strategies which have emanated from this approach. This approach also propagates for curriculum areas in arts, music, literature, dance, etc. which emphasise the development of human side of the learner more than on the development of his intellectual activities.

13.6.5 Reconceptualist Approach

Although reconceptualists have not contributed anything towards 'approach to curriculum' in terms of providing technical knowledge for developing curriculum, they have certainly provided a newer perspective, which is subjective, political, and ideological in nature. This perspective is rooted in the philosophy and social activism of deconstructionists like Count, Rugg, and Benjamin. They challenge the traditional, scientific and rational views of curriculum and they lay emphasis on moral and ideological issues of education and economic and political institutions of society. To sum up, they are good educational critics who view curriculum from a broad ideological perspective.

Check Your Progress

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

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

3. Briefly explain any two features that characterize a curriculum-based approach.

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4. Describe in about 50 words the Behavioural – Rational Approach to the concept of curriculum.

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13.7 EVOLUTION OF CURRICULUM

Having discussed the different interpretations of the term curriculum we concluded that the definition of curriculum changes, depending on the context in which it is used. We also looked at curriculum in the context of different perspectives or approaches regarding its foundations. Let us now look into the evolution of curriculum as a field of study and see how this process of evolution has influenced the content and concept of curriculum from time to time.

13.7.1 Beginning of Curriculum

John Dewey and Johan Friedrich Herbert are the two educationists and thinkers who can be associated with the beginnings of the field of curriculum. They developed their views on education towards the end of the nineteenth century and these greatly influenced American educational thinking and practice.

Curriculum was not a specialized area of study at that time and no one was termed as a curriculum specialist. Theories of teaching and learning were propounded and the Herbartian theory emphasized the concept of “selection” and “organization” of content. The main concern of curriculumists was organization of content. Franklin Bobbitt was the first curriculum specialist who published the book, “The Curriculum” in 1918, followed by another book entitled, “How to Make a Curriculum” in 1924. His publications generated a keen interest in this area and subsequently many other significant publications appeared. The curriculum movement of the 1890s transformed into a vigorous educational movement and by 1930, departments of curriculum were established in colleges and universities. The establishment of the department of curriculum in the Columbia University, in 1937, is a major landmark in the field of curriculum study. Since 1938, there has been tremendous growth in the area of curriculum and it has generated active interest throughout the world. The field of curriculum has also witnessed a shift in the issues to the field. Today, in general, the concern of curriculum studies, seems to be:

- i) Establishing a sound relationship between the general aims and the specific objectives to make the process of teaching and learning effective;

- ii) Making a pedagogically sound sequence of content in accordance with the changing levels of instruction; and
 - iii) Making the curriculum a balanced fare for the overall growth of the learner.
- (Caswell: 1966).

Let us now examine the concept and evolution of curriculum in the Indian context.

13.7.2 Curriculum: Indian Perspective

The Latin root explains 'Curriculum' as a comprehensive course of study to be undertaken by an educational institution and the Sanskrit equivalent emphasises the sequence of content and processes to be followed. The term "National Curriculum" conveys two different meanings (Dewal, 2004). It could mean a carefully designed curriculum that is implemented, practiced and evaluated by the country as a whole. In another sense, it could mean a National Curricular framework, which would provide the guidelines for developing and designing the curriculum across the different states and provinces of the country. This framework will provide the directions in which the educational system of the country has to move vis-a-vis the educational policies. The framework would also provide the basis for effecting curricular changes, based on local conditions and needs within different states. In India, education is a subject both of the state list and the concurrent list. Hence, the mechanism of curriculum development becomes slightly complex, being designed and developed both at the central and the state levels. We shall now examine the historical development of the curriculum in India.

After Independence the educational system of the country was critically examined by the University Education Commission, set up in 1948, under the chairmanship of Dr. S. Radhakrishnan. The Commission revealed that secondary education is the weakest link in the chain of the educational system of the country. Subsequently, the Secondary Education Commission was set up in 1953 to examine the weaknesses of secondary education system. Prior to 1947, the educational system in India was of ten years consisting of middle and high school or matriculation. Subjects taught were English, Vernacular languages, Mathematics, History, Geography and Science. The Secondary Education Commission found the curriculum bookish, and examination-centred with an over-emphasis on memorizing by learners. The Commission recommended the following changes in the curricular designs:

- i) five subjects (two languages, mathematics, social sciences and general sciences) be studied upto class VIII;
- ii) specific stream of studies from class IX to XI;
- iii) duration of schooling to be eleven years; and
- iv) establishment of multipurpose schools to provide education in several academic and vocational streams.

The Government of India appointed the Education Commission in 1964-66 under the chairmanship of Dr. D.S. Kothari. The recommendations of this Commission formed the basis of the National Policy on Education announced in 1968. For the first time, in independent India, the role of education was examined in the context of national development by the Education Commission. The commission recommended a uniform pattern of education comprising five years of primary education, eight years of elementary education (including primary and upper primary stages), two years of secondary education followed by two years of higher secondary education. Science and mathematics were made compulsory upto grade ten. At +2 stage, academic and vocational courses were recommended. The policy statement of NPE – 1968, highlighted certain aspects of higher education. The postgraduate programmes and research activities were given high priority. At the school level, it emphasized the close relational opportunities and qualitative improvement of education. In 1986, the

Parliament adopted a policy resolution called the National Policy on Education, 1986. The major objective was to prepare the Indian masses to take on the challenges of the twentyfirst century. The policy suggested new initiatives in the area of autonomy of universities and colleges, decentralized planning and management. The role of open learning systems in increasing access to education was also emphasized. A detailed plan for implementation of the policy recommendations was prepared and approved by the Parliament as 'Programme of Action' (1986). The major issues dealt with were reforms in examinations, restructuring of degree courses, linking education with research and employment. Subsequently in 1988, the NCERT brought out the 'National Curriculum for Elementary and Secondary Education – A Framework', whose two-fold objectives were to facilitate curricular changes and institutional reforms. Its major recommendations were government interventions pertaining to schools, teachers and local education authorities, child- centred teaching, orientation and training of teachers and examination reforms. It emphasized the participation of local communities in school management. This was followed by the Programme of Action (1992), which proposed several measures in the light of experience gained during implementation of the NPE (1986) and POA (1986). Among other issues, POA (1992) emphasized redesign and restructuring of many undergraduate curricula and courses and organizing teacher's training in academic staff colleges, in a planned manner. Besides, it focused on research in universities, promotion of science education in universities and improving efficiency of universities. A reiteration of the NPE-1986, 1992 and National Curriculum framework 1988 is a National Curriculum Framework for School Education brought out by NCERT in 2000. The framework has strongly emphasized the need for a curriculum to be responsive to the need and aspirations of the people of a country. Stressing on the relevance of religious education, it also recommended teaching of social sciences and promotion of Sanskrit through non-formal means. Hence we find that curriculum in the Indian context has evolved in response to the changing needs and demands of society as well as different policy initiatives emerging out of the various committees and commissions set up by the national government from time to time.

13.8 CURRICULUM: BASIC CRITERIA AND PROCESSES

There are certain criteria and processes that need to be followed for curriculum development. In this section, we shall deal with them.

13.8.1 Curricular Criteria

Let us examine the seven criteria, which curriculum designers must consider. These are:

i) Relevance

A curriculum must be relevant in terms of age, location and content. In order to be relevant, it should be comprehensive to the students.

ii) Geographical Location

Curriculum should also be such that a student can relate to it geographically. In other words, it should reflect the local geographical specifics so that students find it comprehensible. For example a student of Ladakh may not be able to comprehend a description of a locale in Jaipur.

iii) Developmental Stages of the Learners

The breadth and depth of the curriculum should be designed depending on the different stages of the learner as defined by Piaget. In the lower classes, breadth of content

becomes important, whereas at the senior secondary levels, the student must be able to deal with the concepts in greater depth and detail.

iv) Coherence and Connectivity

As the learner progresses from Grade I to Grade XII, he should be able to discern the coherence between the different items learnt. The student should also be able to understand the connectivity and interrelatedness of the various subjects studied.

v) Equity and Excellence

The other two curricular criteria are equity and excellence. Although the two terms are contradictory, yet both can be achieved through sustained efforts in that direction.

13.8.2 Curriculum Processes

Central to an educational enterprise is its curriculum. The curriculum framework has to be designed keeping in focus the existing sociological structure and its demands and also keeping in view the future vision. The curricular process as outlined by Dewal (2004) consists of the following stages – curricular policy leading to a curricular structure, curriculum development, implementation, monitoring, review and revision. Before we briefly describe each process, try and answer the questions that follow:

Check Your Progress

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

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

5. List two general concerns of curriculum designers in the present context.

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6. Which are the seven criteria essential for any curriculum?

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13.8.3 Curriculum Policy

A curriculum policy is derived from the vision of education reflected in the national educational policies and based on the curricular issues and concerns. Moreover, social, economic, cultural and technological factors determine the kind of an educational system and are the sources from which the curricular policies emanate. Curricular policies are themselves based on certain criteria as discussed earlier, like relevance, continuity, breadth and depth of curriculum etc. An examination of all National Curriculum Frameworks reveals a focus on three basic assumptions.

- i) intellectual, emotional and cognitive development of the learner;
- ii) matters related to knowledge – its structure, growth and social realities; and
- iii) a national vision.

Dewal has listed the challenges facing a curriculum policy maker. These are -

- a) global challenge

- b) challenge intrinsic and internal to education and
- c) nation specific challenges

The rapid advancements in technology have fostered greater interdependence and interaction among the nations of the world. The curriculum policies have to focus on challenges posed by the spread of democracy, awareness of human rights, multiculturalism, general decline in moral and ethical values and so on. The curricular policies should equip learners to face these challenges.

13.8.4 Curricular Structure

Curriculum structure refers to the provision of educational programme at various stages of education, beginning from pre-primary leading to the Senior Secondary stage. For e.g. at the primary classes of I and II NCFSE (2000) recommends only three subjects, i.e., language, mathematics and the art of healthy living. At the Secondary level the social sciences were to be taught in an integrated manner as per its recommendations. From classes I and II up to secondary and senior secondary, the curriculum gets more differentiated. Let us examine the basic belief underlying the structuring of curriculum as per the NCFSE (2000). At level I and II, the basic thought was to develop language and mathematical competencies and to facilitate a smooth transaction from home to school. Along with these the students would be taught environmental studies. Other activities at this stage would include music, drama, painting and other such activities. At the next stage i.e., classes III to V the breadth of the curriculum is broadened to include environmental studies along with language mathematics and the art of healthy and productive living. At the higher stages the scope of curriculum widens. For instance at levels VI, VII and VIII the field of healthy and productive living is differentiated into three areas – work experience, art education and physical education. Further diversification and differentiation of the curriculum as we move up from classes VIII to IX and X. The students have to opt for a distinct stream of curriculum at classes XI and XII. Hence the curricular structure determines the scope of the educational programme at a particular learning stage (Dewal, 2004).

Curriculum Schemes (NCFSE, 2005)

NCERT (2005) in its National Curriculum Framework for School Education has provided curriculum schemes for different stages of education. Let us discuss these briefly.

Early Childhood Education

The curriculum framework and pedagogy for Early Childhood Education and Care (ECCE) must be based on the objective of achieving all round development of children – physical, mental, social, emotional and school readiness. Learning during this period need to be based on child's interests and priorities and contextualised in her experiences rather than formally structured. Play, music, rhyme, art and other activities along with opportunities for speaking, listening and expression are essential components of learning at this stage. Language that a child is familiar with need to be used in early education.

Elementary School

The period of elementary school ranges from Class I to Class VIII, which is also the period of compulsory schooling vide the Constitutional amendment making education a fundamental right. During this period the child is introduced to reading, writing and arithmetic. At the later part of elementary school she is introduced to formal disciplines such as sciences and social sciences. The school should emphasize the development of language competence, using language to create, think and communicate with others. Opportunities need to be provided to the students to study in their mother tongue, including tribal languages. English may be taught during this period but not at the expense of learning Indian languages. The development of mathematical thinking through teaching numeracy and mathematics should be emphasized. The development

of aesthetic sensibility, attitudes and skills essential for work through the study of arts and crafts need to be stressed upon. During this period, emphasis must also be given on physical development through sports activities.

Secondary School

Secondary school is a period of intense physical change and formation of identity and it is also a period of intense vibrancy and energy. The courses at this level generally aim at creating the awareness of disciplines and introduce students to the possibilities and scope of study in them. For a large number of children, this is also a terminal stage as they leave school and join the workforce. Apart from usual courses at this level such as two languages (one of which is English), mathematics, sciences and social sciences, the Boards of School must encourage students to choose an optional course from a range, which includes economics, music and cookery. Vocational options like auto maintenance in garages, tailoring and paramedical services could also be introduced.

Higher Secondary Stage

Higher secondary stage comprises two years of schooling where students make choices based on their interests, aptitudes and needs regarding their future life. This stage must offer students possibilities of choosing optional courses of study as per their interest and future career. Instead of restricting the combination of courses in the form of 'science stream', 'arts stream', and 'commerce stream', it is essential to keep all options open for students. For example, new meaningful combinations of study such as, physics, mathematics and philosophy or literature, biology and history may be encouraged. The courses offered in +2 stage need to be alive to developments in the disciplines. Even in a discipline, optional modules can be provided. For example, history can have optional modules of archeology or world history. Academic and vocational stream can also be merged. Facility of guidance and counselling services and continued opportunities for sports and cultural activities need to be provided.

13.8.5 Curriculum Framework

A curriculum framework provides guidelines for translating into practice the scheme of education at various stages of learning. For example, the National Curriculum Framework, (1988) provided the objectives of education, enlisted the scheme of studies at various stages ranging from primary to secondary and outlined the instructional strategies to be employed, medium of instruction and time allocation. The concept of flexibility in time allocation was introduced by the National Curriculum Framework (2000). The basis of this departure from the earlier framework was based on the premise that subject-wise allocation of instructional time should be left to the discretion of the individual institutions. It followed the principle of decentralization. However the NCFSE (2000) did spell out that the time to be spent for instructional purposes should be 180 days. The number of school hours and duration of each period was also provided. For example, it mentioned that a school period engages students for only three hours. [Dewal, 2004]

13.8.6 Curriculum Implementation

Implementation of the curriculum requires coordination among the various activities related to it. Implementation would be effective if the infrastructure facilities are adequate, teaching-learning material is provided and teachers are trained. It demands unanimity in thought and action on the part of the educational planners and administrators. The requirements should be provided at the right time. Implementation involves the following activities:

- development of syllabus
- preparation of text books.
- development of student support materials

- Orientation and training of teachers and administrative staff.

For curriculum implementation to be meaningful, the physical infrastructure in schools and trained teachers should be available as per requirement.

13.8.7 Curriculum Review and Revision

Improvement in any system can be effected only through the process of review or monitoring. The same is also true for curriculum, the monitoring of which will directly lead to improvement in the educational system as a whole. Even a well-designed curriculum needs to be reviewed periodically. A curriculum can be monitored by collecting data related to the programme and its outcomes. The curriculum of that programme can then be revised on the basis of review data. Review process also takes into account the gaps between the formulated objective and the outcomes resulting from the implementation of the curriculums. The revision of the curriculum could be undertaken in one many aspects of the curriculum pertaining of either content, methodology, text books, learning materials, etc. (Dewal, 2004)

13.9 CURRICULUM AND THE ROLE OF TEACHERS

Teachers determine to a large extent the manner in which the curriculum is executed in the classroom. Their role is defined in respect of curriculum transaction and evaluation. It is also believed that teaching-learning would be more effective if the teacher is involved in the process of the curriculum development. Their role could be instrumental in the overall improvement of the curriculum.

Doll (1996) highlights three reasons why teachers could be effective improvers of the curriculum:

- i) Work in close proximate with the learners
- ii) Engaged in individual study and
- iii) Interact with other teachers and share their curricular experiences.

These three factors enable them to develop insights and skills and can thus improve the quality of learning experiences, which they provide to the learners.

Teachers strive to fulfill educational objectives by fostering understanding and tolerance among students, awaken curiosity and stimulate independent thinking. The style of teaching also greatly influences the manner of curriculum transaction. Hence teachers must be involved in the process of curriculum planning, development, delivery, evaluation and review (Dewal, 2004). A teacher's style can either promote role learning, or, alternatively, it can awaken a child's curiosity.

Teacher's involvement and familiarization with curriculum construction can make the teaching-learning process more relevant and authentic. Once the basis and the instructional role of curriculum are understood, the teacher can think in terms of alternatives. The evaluation mode and techniques shall, as a result, be more in agreement with the aims and objectives of curriculum.

13.10 CURRICULUM CHANGE

From the earlier discussions it is evident that curriculum in our country has evolved and caused socio-educational changes. It has been in tune with the changing aims and priorities of education since the turn of the century. For example, the aim of education in the early twentieth century was rigorous intellectual training. However towards the second and third decades of the twentieth century, the scope of school curriculum, which was purely academic in nature, was broadened by incorporating non – academic

and vocational aspects in the curriculum. Even now, at the beginning of the twenty-first century, the scope has been further widened by incorporating newer areas of study.

Hence curricular inputs should be in consonance with the changing social needs and should be relevant to the times. They should keep in focus the vision of the future. Curriculum changes must strengthen gender equality, promote special education, harness the potential of ICT and make learners aware of global trends and issues. Dewal (2004) has elaborated on the prerequisites of curriculum change. These are:

- Teacher training for suitable transaction of the curriculum;
- Development of support materials for teachers;
- Provision of instructional facilities which enables every school to function for 180 days 5 hours each day;
- Teachers should ensure learner participation during classroom instruction;
- Evaluation should be continuous and learner friendly;
- Involvement of NGO's along with the government agencies for management of curriculum change; and
- For a complete implementation of the curriculum, education administrators and curriculum designers have to function as change agents.

A socially relevant curriculum can be ensured if the panels and commissions, which formulate educational priorities, include the following representative groups –

i) Students -

Post secondary students are mature and capable enough to provide input in developing educational aims.

ii) Parents -

Since they are concerned with the overall development of their children, parental inputs can be useful.

iii) Educators -

Teachers, administrators and public leaders must take on the responsibility of fixing educational aims and priorities.

iv) Researchers -

A researcher or a social scientist can contribute to the curricular change by providing objective data concerning social issues and trends.

v) Community members -

Irrespective of whether they have school-going children or not, the citizens have a civic responsibility towards the schools. Their support in formulating educational priorities will be significant as they decide matters pertaining to school or college, directly or indirectly.

vi) Business community -

They have a stake in the outcomes of schooling in the context of manpower technology and industrial output. This community also exerts economic and political influence. Hence they must be enlisted in school matters.

vii) Political officials -

Policies and educational policy go hand in hand, hence this group should also be enlisted.

viii) Pressure groups -

People can have impact by organizing into groups that promote special interests. Such an activity is valid within a democratic set up. [Ornstein and Hunkins, 1988]

13.10.1 Implementation of Curriculum Change

A curriculum can be really useful and purposeful if it addresses the major issues and concerns of society. It should also not lose sight of the national and global content of education, must ensure complete utilization of information and communication technology and at the same time emphasize the role of teacher-pupil interaction in the teaching learning process. The National Curriculum Framework – 2000 uses the term 'Managing the System', because it views curriculum change as a system. Curriculum planners should spell out an 'action plan' against a certain time frame, for implementation of the curriculum. This action plan will then serve as a road map for the implementers of the curriculum. For this, an implementation strategy has to be worked out. Based on the action plan which allocate roles to all the functionaries involved in curriculum, an administrative structure needs to be evolved for implementation of the following issues:

- i) Curriculum is developed and reaches the relevant segment of society.
- ii) Teacher training activities are executed.
- iii) Preparation of text books and other support material
- iv) Monitoring mechanism to facilitate the review and revision of the curriculum.

In Dewal's (2004) view, a monitoring mechanism should be an inherent part of the implementation strategy. A monitoring system would provide feedback on the extent of achievement of educational endeavours, as visualized. It will also throw light on whether the:

- administrative structure is able to execute the curriculum
- development of text books and study material, and teacher training is as per schedule
- classroom teaching is proceeding as designed, and
- there is provision of threshold facilities in the institution.

Educational administrators have a key role to play in managing curricular change. Their scheme of curriculum implementation and improvement must provide an opportunity for curriculum implementers and evaluators to interact periodically. Proper transaction of the curriculum in the educational institutions must be ensured, for which a monitoring mechanism should be in place.

13.11 LET US SUM UP

In this unit, we dealt with the definitions of the term "curriculum". Various interpretations of the term curriculum were also examined. Depending on the context, curriculum has been interpreted as –

- a programme of studies
- a product
- intended learning outcomes, and
- planned learning experiences

We explained the various approaches to curriculum, which designers adopt. A curriculum approach reflects a curricularist's holistic perspective and viewpoint about the design and development of the curriculum. The approaches discussed were –

- Behavioural - Rational
- Systems – Managerial
- Intellectual - Academic

- Humanistic - Aesthetic
- Reconceptualist

In this unit we also gave you an outline of the curriculum movement and its influence on the concept of curriculum.

We further discussed the development of curriculum in the global and Indian perspective. We traced the development of curriculum through the commission and policies formulated from time to time. This was followed by a discussion on the basic criteria and process underlying a curriculum. The role of teachers as executors of the curriculum was also highlighted. The unit ended with a discussion on the process of curriculum as change and how the change could be implemented of revision and improvement of the curriculum. The existence of an inbuilt monitoring mechanism was emphasized to ensure that the curriculum was being transacted as visualized.

13.12 UNIT-END ACTIVITIES

1. Interview teachers, students, educational administrators and parents of students and find out from them what they mean by the word 'curriculum'.
2. Make an analysis of the National Curriculum Framework for School Education (2005) and find out its striking features.

Visit <http://www.ncert.nic.in> for NCFSE (2005).

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13.14 ANSWERS TO CHECK YOUR PROGRESS

1. The four categories of definitions of curriculum are – i) Product ii) Programme of studies iii) Intended learning outcomes iv) Planned learning experience.
2. The advantages of defining curriculum as a programme of studies are:
 - a) Curriculum can be described in context terms
 - b) Learning occurs in many different setting in the school other than the specified courses of study.
3.
 - i) It reflects a person's viewpoint a perception of reality or a holistic position about the foundations, domains and theoretical an practical principles of curriculum.
 - ii) It express a person's outlook of school and society, role of the learner, teacher, curriculum planners and the issues that need to be emphasized.
4. It is a technical-scientific approach. The proponents of this approach view curriculum designing as a structured and sequential process. The process begins with specification of goals and objectives, sequencing content and activities in relation to the objectives and evaluation of learning outcomes based on specified goals and objectives.
5.
 - i) A balanced curriculum ensuring overall growth and development of the learners.
 - ii) Establishing a relationship between general aims and specific objectives to make the process of teaching and learning effective.
6. The seven criteria for any curriculum are -
 - i) Relevance of content
 - ii) Geographical location
 - iii) Breadth and depth of content
 - iv) Coherence among different aspects of content
 - v) Equity
 - vi) Excellence

UNIT 14 FOUNDATIONS OF CURRICULUM

Structure

- 14.1 Introduction
- 14.2 Objectives
- 14.3 Philosophical Foundations and Curriculum
 - 14.3.1 Philosophy and Curriculum
 - 14.3.2 Major Philosophies and Curriculum
 - 14.3.3 Modern Indian Educators and their Contribution to Curriculum
- 14.4 Sociological Foundations of Curriculum
 - 14.4.1 Society, Education and Schooling
 - 14.4.2 Social Change and the Curriculum
 - 14.4.3 Planning for Curriculum Change
- 14.5 Psychological Foundations of Curriculum
 - 14.5.1 Learning Theories and Curriculum
 - 14.5.2 Transfer of Learning
 - 14.5.3 Basic Human Needs and Curriculum
- 14.6 Let Us Sum Up
- 14.7 Unit-end Activities
- 14.8 Points for Discussion
- 14.9 Suggested Readings
- 14.10 Answers to Check Your Progress

14.1 INTRODUCTION

We have discussed the meaning and concept of curriculum in the previous unit. Having discussed the concept of curriculum, we now come to the foundations of curriculum. When we develop a curriculum we depend primarily on ideas that stem from three major fields: Philosophy, Sociology and Psychology. These traditional fields are considered the foundations of curriculum and their understanding is crucial for the study of curriculum.

Philosophy deals with the nature and meaning of life. It inquires into the nature of human beings, the values that shape their lives and the role and purposes of education. One's perception of philosophy greatly influences one's views of learners and of various learning activities. A curriculum should also be socially relevant. Hence a study of sociological factors is imperative as it provides necessary clues about the characteristics of contemporary and future life of the learner. This helps to make the curriculum socially relevant. Psychology deals with basic human needs, attitudes and behaviours. It helps to understand the nature and characteristics of learners. Psychology thus provides curriculum planner the basis for identifying a curricular arrangement that will most benefit the learners, in terms of their growth and development. In this unit, we shall deal with these three foundation areas and understand how each influences curriculum plans, which in turn equip the learner with a wide range of individual and social experiences.

14.2 OBJECTIVES

After studying this unit, you should be able to:

- describe various philosophies and their implications for the field of curriculum;
- identify philosophical issues that need to be considered in framing a curriculum;
- explain the relationship between philosophy and knowledge;
- classify knowledge in terms of meaning and forms;
- describe the sociological determinants of curriculum;
- explain the impact of social change on curriculum;
- describe the importance of psychology – basic human behaviours and needs – in the fields of curriculum; and
- identify basic human needs that should be considered while framing a curriculum.

14.3 PHILOSOPHICAL FOUNDATIONS AND CURRICULUM

Philosophy is an important foundation of curriculum because it influences our educational aims and goals, and content, as well as organization of curriculum. Philosophy helps us to deal with our systems of beliefs and values, our perception of the world around us and our definitions of what is most important to us. Philosophy deals with the larger aspects of life, the problems of living and the way we organize our thoughts and facts. It is an effort to see life and its problems in full perspective. It involves an understanding of the cause and effect relationships, questioning one's point of view and that of others, clarifying one's beliefs and values, and formulating a framework for making decisions and acting on these decisions. Philosophical issues impact on schools and society. We need a basic philosophy of education, which would form the basis of appraisal and reappraisal of our schools. In short, philosophy of education influences, and to a large extent determines, our educational decisions, choices and alternatives. In this section we shall deal with several different philosophies which impact on curricular designs.

14.3.1 Philosophy and Curriculum

Philosophy is important to all aspects of curriculum. It provides educators, particularly curriculum workers, with a framework or base for organizing school and classroom activities. It helps them decide what school materials to use. Almost all elements of curriculum are based on philosophy. As Goodlad (1979) points out, "Philosophy is the guiding point in curriculum decision making and influences all subsequent decisions regarding curriculum". Smith et. al. (1957) say, "It is essential for 1) formulating and justifying educational purposes; 2) selecting and organizing knowledge; 3) formulating basic procedures and activities; and dealing with verbal traps (What we see versus what is real)".

According to Ornstein and Hunkins (1988) the function of philosophy could be either 1) to serve as the base or starting point of curriculum development or as 2) an interdependent function with other functions in curriculum development.

The proponents of the first school of thought to which John Dewey belonged contented that "philosophy may be defined as the general theory of education," and that, the business of philosophy is to provide, 'the framework for the "aims and methods" of schools'. For Dewey (1916), "education is the laboratory in which philosophic distinctions become concrete and are tested." The second school of thought is exemplified by Tyler (1949). According to him, philosophy is one of five criteria

influencing educational goals, and is interrelated to the other criteria like studies of learners, studies of contemporary life, suggestion from subject specialists and the psychology of learning etc. This is explicated diagrammatically in fig. 14.1.

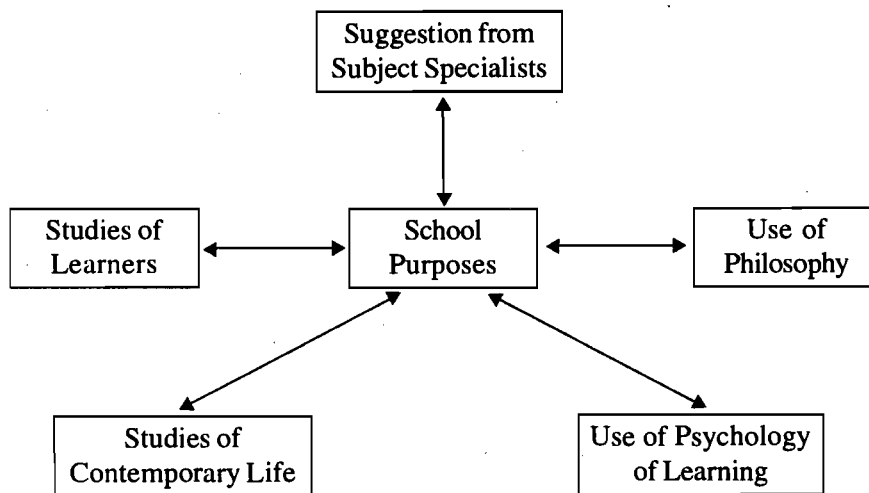


Fig. 14.1: Tyler's View of Philosophy in Relation to School Purposes.
(Source: Ornstein and Hunkins, 1988)

Let us examine how certain philosophies influence curriculum activities.

14.3.2 Major Philosophies and Curriculum

Since philosophy is a major foundation area in curriculum, it is necessary to explore the different philosophies that influence curricular decisions.

Here we shall look into the following four major philosophical positions that have hitherto, influenced curriculum development:

- i) Idealism
- ii) Realism
- iii) Pragmatism
- iv) Existentialism

i) Idealism

Idealism emphasizes that matter is an illusion and moral and spiritual reality is the chief explanation of the world. They consider truth and values as absolute, timeless and universal. The world of mind and ideas is permanent, regular and orderly; it represents a perfect order.

Eternal ideas are unchangeable and timeless. Knowledge consists of rethinking of the latest ideas present in the mind. It is the teacher's job to bring out this latent knowledge into the consciousness of the child. This view, applied to education, would imply that teachers would act as role models of enduring values. The school must be highly structured, advocating only those ideas that demonstrate those enduring values. The choice of instructional materials would depend on the subjects, which constitute the cultural heritage of mankind. According to Ornstein and Hunkins (1988), the hierarchical sequence places abstract subjects like philosophy and theology on the top. Mathematics helps to develop the power of abstract thinking and occupies an important position. History and Literature also rank high since they are sources of moral and cultural values. Lower in the hierarchical ladder are natural and physical sciences as they deal with cause and effect relationships. Language also occupies an important position since it is a tool for communication. According to idealists, learning does not comprise acquisition of facts from various disciplines. Idealists believe that learning is based on broad ideas and concepts.

One of the earliest proponents of the idealist philosophy is Plato. Others who gave an idealist conception of reality were transcendentalist philosophers in the US like R.W. Emerson and Henry Thoreau. In education, the idealist philosophy was propagated by Frederic Froebel, the founder of the kindergarten.

ii) Realism

Another traditional school of thought is realism and the propounder of this philosophy is Aristotle. Pestalozzi's instructional principles were based on realism. The realist views the world in terms of object and matter. He believes that human behaviour is rational when it conforms to the laws of nature and is governed by social laws. People perceive the world through their senses and reason. Realists consider education as a matter of reality rather than speculation. According to realists, curriculum follows a hierarchical order with the abstract subjects at the top and the transitory subjects at the bottom. They stress that a curriculum consists of organized body of knowledge pertaining to specific areas. For example, the history curriculum comprises experiences of mankind. Details related to animals can be studied in zoology. Like the idealist, the realist also stresses logic and lessons and exercise the mind that cultivate rational thought. It is the responsibility of the teacher then, to impart to the learners the knowledge about the world they live in. Logic and the experiences that cultivate human mind are emphasized in curriculum. The three "Rs" (reading, writing and arithmetic) are also necessary in a person's basic education. According to the realists, the subject experts are the source and authority for determining the curriculum.

iii) Pragmatism

Pragmatism, also referred to as experimentalism, is based on change, process and relativity. In contrast to the traditional philosophies, i.e., idealism and realism, pragmatism suggests that the value of an idea lies in its actual consequences. Learning occurs as a person engages in problem-solving which is transferable to a wide variety of subjects and situations.

Learning is considered as a transaction between the learner and his environment. Basic to this interaction is the notion of change. In this sense, whatever values and ideas are upheld currently would be considered tentative since further social development must refine or change them. Concepts of unchanging or universal truths are meaningless. For instance, at a particular period of time it was generally believed that the earth was flat, which was subsequently disproved through scientific research.

To consider, therefore, what is changeless (idealism) and the perceived universe (realism) and to discard social and/or perpetual change is detrimental to the overall growth and development of children. Let us now visualize how pragmatism would have influenced the framing of curriculum.

Curriculum, according to pragmatists, should be so planned that it induces teachers and the learners to think critically, rather than what to think. Teaching should, therefore, be more exploratory than explanatory. Learning takes places in an active way as learners solve problems, which help them widen the horizons of their knowledge and reconstruct their experiences in consonance with the changing world. Therefore, the teacher should provide learners learning opportunities to construct their own learning experiences. They stress more on problem-solving using scientific method than acquiring an organized body of knowledge.

iv) Existentialism

Pragmatism is mainly an American philosophy that evolved just prior to the turn of the twentieth century, but existentialism is mainly a European philosophy that originated before the turn of the century, and became popular after World War-II. This doctrine emphasizes that there are no values outside man, and thus, suggests that human beings

should have the freedom to make choices and then be responsible for the consequence of these choices.

According to the existentialist philosophy, learners are thrust into a number of choice making situations. Learners should be given the freedom to choose what to study, and also to determine what criteria to determine these truths. It emphasizes that education must centre on the perceptions and feeling of the individual in order to facilitate understanding of personal reactions or responses to life situations. Of primary concern in this process is the individual. Since life is based upon personal meanings, the nature of education, the existentialists would argue, should be largely determined by the learner. Individual learners should not be forced into predetermined programmes of study. Rather learning provisions must be made by the teacher according to choice of the learners.

Omstein and Hunkins (1988) are of the view that an existentialist curriculum would focus on experiences and subjects that lend themselves to philosophical dialogue and acts of choice making. It would enable activities of self-expression and experimentation. The teacher becomes a partner in the process of teaching-learning, assuming a non-directive role. The teacher is a more of a facilitator enabling the learner to explore and search to develop insights rather than one who imposes predetermined values.

Existentialism has gained greater popularity in recent years. Today, many educationists talk focusing on the individual, promoting diversity in the curriculum and emphasize the personal needs and interest of learners.

Before we process further, let us work out an exercise.

Check Your Progress

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

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

1. What is the role of teachers according to realists?

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.....

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.....

2. What kind of philosophical approach should curriculum specialists adopt while planning curriculum?

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Having seen the four basic philosophical positions that have influenced curriculum development, let us now make a note of a few educational philosophies, in order to reinforce what has been said so far.

Till now we discussed four major philosophies and their implications for curriculum. Now let us examine the implications of some more philosophies for curriculum.

Perennialism

Perennialism is the most conservative educational philosophy and is rooted in realism. It advocates the permanency of knowledge that has stood the test of time and the values that have moral and spiritual bases. The underlying ideas are that education is

constant, absolute and universal. The curriculum of the perennialist is subject-centred. It draws heavily on defined disciplines or logically organized bodies of content. It emphasizes teaching/learning of language, literature, sciences and arts. The teacher is considered as an authority in his/her particular discipline and teaching is considered an art of imparting information/knowledge and simulating discussion. In such a scheme of things, students are regarded immature, as they lack the judgement required to determine what should be studied, and it is a fact that their interest demands little attention as far as curriculum development is concerned.

There is usually one common curriculum for all the students with little room for elective subjects. According to this viewpoint, sending some students through an academic curriculum and others a vocational curriculum is to deny the latter a genuine equality of education opportunities. The education advocated by perennialists appeals to a small group of educators who stress intellectual meritocracy. Their emphasis is on testing students, enforcing tougher academic standards and programmes and identifying gifted and talented students.

Progressivism

Progressivism is a development over pragmatic philosophy and is in contrast to perennialist thinking in education. It was considered a contemporary reformist movement in educational, social and political affairs at the turn of the twentieth century. Horace Mann and Henry Bernard of the nineteenth century contributed significantly to progressivism through their writings. Dewey viewed school as a miniature democratic society, in which students could learn and practice the skill and tools necessary for democratic living. According to progressivism the skill and tools of learning include problem solving methods and scientific inquiry; in addition, learning experiences should include cooperative behaviour and self-discipline, both of which are important for democratic living (Ornstein and Hunkins, 1988).

The curriculum, thus, was inter-disciplinary in nature and the teacher was seen as a guide for students in their problem solving and scientific projects. Dewey and William Kilpatrick both referred to this role as the "the leader of group activities". The teacher and students planned activities together, but the teacher was to help students locate, analyses, interpret and evaluate data to formulate their own conclusions.

Although the progressive movement in educational encompassed many different theories and practices, it was united in its opposition to the following traditional attributes and practices (Ornstein and Hunkins, 1988)

- the authoritarian teacher
- excessive dependence on text book methods
- memorization of factual data and learning by excessive drilling
- static aims and materials that reject the notion of a changing world
- attempts to isolate education from individual experiences and social reality.

Although the major thrust of progressive education waned in the 1950s with the advent of "essentialism", the philosophy has left its imprint on education and educational practices of today. Contemporary progressivism is expressed in several movements including those for a socially relevant curriculum i.e., a match between subjects taught and students' needs.

Essentialism

Being a conservative philosophy, essentialism with its roots in both idealism and realism, evolved mainly as a critique of progressive thought in education. Yet, the proponents of essentialism do not totally reject progressive methods, as they do believe that education should prepare the learner to adjust with the changing society. Thus, in essentialism learning should consist in mastering the subject matter that reflects currently available knowledge in various disciplines. The teacher is considered a master of a

particular subject and is to be respected as an authority because of the knowledge and high standards he or she holds. The institution (be it school or college) gets sidetracked, when, at the expense of cognitive needs, it attempts to pay greater attention to the social and psychological problems of students.

In recent years, the essentialist position has been stated vociferously by critics who claim that educational standards softened during the 1960s and 1970s. The most notable achievements of the essentialists have been widespread implementation of the competency based programme, the establishment of the grade-level achievement standards, and the movement to re-emphasize academic subjects in schools/colleges. In many ways, the ideas of essentialism lie behind attacks on the quality of education by the media and by local pressure groups, and also to a good extent on distance education.

Reconstructionism

A group of thinkers felt that progressivism put too much emphasis on child-centred education that mainly served the individual child and middle class, with its play theories and private schools. What needed were more emphasis on society-centred education that took into consideration the needs of society (not the individual) and all classes (not only the middle class).

Reconstructionism views education as a means to reconstruct the society. The reconstructionists believe that as the school/college is attended by virtually all the youth, it must be used as a means to shape the attitudes and values of each generation. As a result, when the youth become adults they will share certain common values, and thus the society will have reshaped itself.

The reconstructionist curriculum consists of subjects which promote new social, economic and political education. The subject matter is to be used as a vehicle for studying social problems, which must serve as the focus of the curriculum.

Views of some recent reconstructionist have been put forth by Ornstein and Hunkins, (1988) who have given a reconstructionist programme of education which emphasize the following:

- critical-examination of the culture heritage of a society as well as the entire civilization;
- scrutiny of controversial issues;
- commitment to bring about social and constructive changes;
- cultivation of a planning-in-advance attitude that considers the realities of the world we live in; and
- enhancement of culture renewal and internationalism;

Stemming from this view, reconstructionism expands the field of curriculum to include intuitive, personal, mystical, political and social systems of theorizing. In general, the curriculum advocated by reconstructionists, emphasizes sociology, psychology and philosophy, and not the hard sciences. The thrust is on developing individual self realization and freedom through cognitive and intellectual activities, and thus on liberating people from the restrictions, limitation and controls of society. The idea is that we have had enough of discipline-based education and narrow specialization, and we do not need more specialists now, we need more 'good' people if we want to survive.

The reconstructionists, including such recent proponents as Mario Fantini, Harold Shane and Alvin Toffler, seek a curriculum that emphasizes cultural pluralism, internationalism, and futurism. Students should be taught to appreciate life in a world of many nations – a global village – with many alternatives for the future, they advocate.

Let us now ponder over the insights we gained from the discussion on philosophical foundations of curriculum. Philosophy gives meaning to our decisions and actions. Those involved with curriculum development should be familiar with the contemporary dominant philosophy. In the absence of a clear-cut philosophy, our curriculum plans and teaching procedures will tend to be inconsistent and confused. Dewey was so convinced of the importance of philosophy that he viewed it as the all-encompassing aspect of the educational process. Major philosophical viewpoints that have emerged within the curriculum field may be viewed along a continuum – idealism, realism, pragmatism and existentialism. These general or world philosophies have influenced educational philosophies along the same continuum: perennialism, essentialism, progressivism and reconstructionism. Very few schools adopt a single philosophy: in practice, most schools combine various philosophies.

What we as curriculum specialists need to do is to adopt an eclectic approach, the middle road, where there is no emphasis on extremes of subject matter or socio-psychological development, excellence or equality. We must understand that curricularists have to continuously reflect on their curricular decisions, and these should be based on the changing needs of the students and society. Hence a curriculum philosophy should be one that is politically and economically feasible and serves the needs of students and society.

Check Your Progress

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

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

3. What do the reconstructionists emphasize with regard to the role of education and curriculum?

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4. How is curriculum organized according to advocates of perennialism?

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14.3.3 Modern Indian Educators and their Contribution to Curriculum

Let us now examine the contribution of Indian educationists and thinkers, in the realm of education. You will understand that their general philosophy of life shaped their educational and curricular philosophy, which resulted in some revolutionary concepts of our times like the scheme of Basic Education of Gandhiji and Shantiniketan of Rabindranath Tagore.

Rabindra Nath Tagore

Tagore was an “individualist” and “naturalist” like Rousseau. He believed that every individual had the right to shape his life in his own way. In every individual the Creator manifests Himself in a unique way and each one tries to realize the Creator in his/her own way. According to Tagore, this was the unifying factor not only for all mankind, but also between man and nature. Thus, Nature played a very important role in his

philosophy of life. Tagore opined that God reveals himself more through Nature than man. Hence he felt that human beings should have greater communication with nature and should experience nature's purifying and vitalizing forces. Tagore emphasized that the aim of an individual's life should be to prepare for the other world. (Taneja and Taneja, 1980).

Tagore's Shantiniketan

Tagore's educational philosophy was epitomized in the creation of Shantiniketan, whose governing features are freedom of mind, heart and will. Mere acquisition of knowledge or information never appealed to Tagore. He firmly believed that complete education of a man implied education of his emotions and senses as much as that of his intellect.

Established in 1901, Shantiniketan grew to become a university, Vishwa Bharati, in 1921. Scholars from different parts of the world enroll in the university. The University comprises many departments – Shishu Bhavan (Nursery School), Path Bhavan (Secondary School), Shiksha Bhavan (Higher Secondary), Vidya Bhavan (College of U.G. and P.G. Studies and Research), Vinaya Bhavan (Teachers College), Kala Bhavan (College of Fine Arts and Crafts), Sangeet Bhavan (College of Music and Drama) etc. The curricula are based on activity centred approach to learning to facilitate originality and creativity in thoughts and expression. Other teaching methods employed are discussions, teachers and debates (Shivarudrappa, 1985).

Tagore was of the firm belief that human personality should be developed in an atmosphere of freedom and fellowship. His educational philosophy which culminated in Shantiniketan (now Vishwa Bharati) promotes inter-cultural and inter-racial unity, which is the mission of the present age.

Mahatma Gandhi

Gandhiji's contribution to Indian educational thought and practice is substantial. He was basically a statesman and social reformer, but his educational experiences shaped his educational philosophy. Before we come to Gandhiji's educational philosophy, let us understand his general philosophy of life. "Truth" and "Non-Violence" are the two basic concepts fundamental to his philosophy. He asserted that "Truth is God" and that even the most ignorant man has some truth in him. Gandhiji believed that there was a God in every human being and did not reside in temples, churches or mosques. Realisation of God is possible only through service to humanity. His revolution in the Indian society was total – economic, social, political and intellectual, and in nature was non-violent. He believed that violence was an emotional act and non-violence was a rational virtue. Non-violence was a weapon for social service and realization of truth.

Wardha Scheme

Gandhiji launched a nationwide scheme, as a protest against established orthodox practices in education. Its outstanding features were:

- Free and compulsory primary education;
- Education of craft – psychologically desired because it relieves the learner from the monotony of passive theoretical instruction; socially desirable since it reduces difference between manual and mental labour; and economical since costs are met through production gains of the system;
- Self supporting educational system – It supports the educational process and the child in later life;
- Medium of instruction should be the mother tongue; and
- Emphasis on ideal of citizenship – Social, moral, political and moral generation of the country depended on education. (Seetharamu, 1989).

Keeping the aforementioned factors in mind, Gandhiji evolved an absolutely new philosophy of education. In his view education implied, "an all round drawing out of the best in child and man – body, mind and spirit". He firmly believed that a sound educational system should produce useful citizens – whole men and whole women with all-round development of the personality. Gandhiji curriculum is activity centred and craft centred. The curriculum based on his philosophy consists of the following subjects:

- a) Basic craft – agriculture, spinning, weaving etc.
- b) Mother Tongue
- c) Mathematics – useful for craft and community life
- d) Social Studies – Social and economic life of the community, culture of the country, etc.
- e) General Sciences – natural study, zoology, physiology, hygiene, physical, etc.
- f) Drawing and Music

Gandhiji's Method of Teaching

He advocated the activity method i.e. learning by doing. By this he meant that education should revolve around some vocational activity and training must be imparted in that. He also emphasized that schools should be activity schools. This would ensure that the child's mind is never dulled or cramped, since an activity-oriented curriculum would be joyous and inspiring for them.

Assessment of Gandhiji's Scheme of Education

Gandhiji's philosophy of education is a synthesis of three philosophies – idealism, pragmatism and naturalism. Gandhiji was an idealist. He believed in God or the Universal spirit, which resides in all living beings. He therefore wanted men to aim, not only at self-realization but also be one with God. According to him, self-realisation should be the goal when training the young. He can be called an idealist since he emphasized the all round development of personality – i.e. spiritual, intellectual, moral and physical development.

Since Gandhiji's educational endeavours were based in natural surroundings - Ashram life, gurukul type of education – he can be called a naturalist. He advocated that children should be taught "in an atmosphere free from superimposed restriction and interference". He opposed text book education. Since Gandhiji was a proponent of self-discipline among children, his educational philosophy can be considered as a fusion of idealism and naturalism. He believed that children should have sufficient freedom to develop and grow. However, they must accept discipline and training, if they want to grow to the fullest.

Gandhiji was also a pragmatist to the same degree as he was an idealist and naturalist. Learning by doing was the chief tenet of his educational philosophy. His craft-centred or activities-centred curriculum was based on his pragmatic approach to education. He experimented first and then preached it. He deemed as true only that which could be experimentally verified. Thus, Gandhiji's scheme of education was a reflection of the amalgamation of the dominant tendencies of naturalism, idealism and pragmatism in a unified whole.

Sri Aurobindo Ghosh

Aurobindo was a great philosopher sage and poet in the galaxy of Indian philosophers. His philosophy of life centred rounds the transforming power of the realization of 'Sublime truth'. He preached the basic units of truth. As Aurobindo puts it, "First of all there is undoubtedly a Truth, one and eternal, which we are seeking, from which all

other truth derives, by the light of which all other truths find their rightful place, explanation and relation to the scheme of knowledge". His philosophy is performed as integral philosophy because he tried to integrate the worldly elements of life into a single whole. He took an integral view of life into a single whole. He took an integral view of life, which implied a healthy integration of God and man.

Sri Aurobindo's Concept of Education as Self-realization

Sri. Aurobindo's philosophy of integral education is derived from the teaching of Taittiriye Upanishad. The self is surrounded by five layers (or sheaths) called 'panchkosas'. Education of the self relates to education of all these five levels, which in the end leads to integral education. It can be represented schematically as:

Cells /layers	Meaning	Appropriate education
Annamaya Kosha	Physical cell	Physical education
Pranamaya Kosha	Vitality cell	Vital education (of sense organ)
Manamaya Kosha	Mental cell	Intellectual education
Vijnanamaya Kosha	Psychic cell	Social and emotional education
Anandimaya Kosha	Spiritual cell	Spiritual education

(Seetharamu, 1989)

Complete education would involve meaningful growth and stimulation of these cells. He believed that activities of human beings should relate to these five aspects – physical, mental, vital, psychic and spiritual. Growth of the individual results when one phase of activity succeeds the other in the same chronological order. However, these phases do not replace one another but continue throughout the individual's life.

Sri Aurobindo's system of education is highly psychological. His educational philosophy is rooted in individual attention, promotes creativity, encourages dialogue and attempts an all-round development of the individual. He also propounded the method of activity and discovery. According to him a teacher is a guide and facilitator in learning, rather than provider of knowledge.

Hence we find that the curricula propounded by the Indian philosophers were shaped by their educational philosophies. Tagore was a naturalist and believed that human personality should be developed in an atmosphere of freedom and fellowship, lived in nature and through creative activities of the mind. Gandhiji synthesized the individual and social aims of education. He attempted to plan an activity curriculum, which would transform the schools into "place of work, experimentation and discovery". His education was child centred and based on the 'activity principle'. Gandhiji emphasized the creative and artistic aspect of handwork or craft through his scheme of Basic Education. Tagore and Gandhiji both believed that education should be a source of joyful learning for the child. Sri. Aurobindo's philosophy lays great emphasis on the powers of the child's mind, which advocates education according to age, ability, and aptitude of the child. This concept has also been adopted in the modern education system. He focused more on the moral and religious education of man, the lack of which in the present day is corrupting the human race. He propounded that while imparting training emphasis should be on observation, attention, imagination, judgement and memory. His was an eclectic philosophy, which combined idealist belief, realistic approach and pragmatic action.

Check Your Progress

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

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

5. What were emphasized in the curricula as conceptualized by Tagore, Gandhi and Sri Aurobindo?

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14.4 SOCIOLOGICAL FOUNDATIONS OF CURRICULUM

Education is a process of transmission of culture. Curriculum designers must consider the social settings in general and the relationships between school and society in particular. Curriculum planners also need to assess the influence these social factors have on curricular decisions. Curricular decisions take place in complex social settings through demands that are imposed by society and also have a direct bearing on schools. Hence, curriculum workers need to consider and use social foundations to plan and develop the capacity to respond intelligently to social problems. In this way the curriculum serves both the needs of the learner and the society. For these reasons, in developing curricular plans, we must consider the characteristics of contemporary society as well as those that may emerge in the future.

14.4.1 Society, Education and Schooling

The social world of children and youth cannot be ignored because they do live in a world larger than school, which influences their interests and attitudes. School is maintained by society to help the young to adapt and prepare for life in the larger society. The kind of education our young receive determines the quality of our society. A society's culture is maintained and transmitted to the next generation by the educational system. According to Dewey (1916), "education is a primary responsibility of educators – (to) be aware of the general principle of the shaping of actual experiencing by envioning conditions" and to understand "what surroundings are conducive to having experiences that lead to growth". Education most of the time is considered synonymous with schooling. But in actual fact even a society that has no formal schools educates its young through ceremonies, rituals, stories, observation and emulation of parents, elders etc. The norms of society govern their interpersonal relations and produce a model personality, which will help the attitudes, feeling and behaviour patterns to be in conformity with established norms of behaviour. Sex roles – The way boys and girls, men and women are supposed to act – provide a good example of this type of socialization. Sex roles vary from one culture to another, but within a given set up they are rather well defined. From this we can conclude that besides classroom curriculum society also plays a vital role in shaping the attitudes of the young. Global aspects of human growth and development are accomplished by the structured curriculum of school and partly by the society. A curriculum while reflecting contemporary social forces on the one hand should also be able to respond to the dynamics of change on the other. The curriculum should mirror the existing social forces and help to shape society.

14.4.2 Social Change and the Curriculum

Contemporary society is changing so swiftly that we have difficulty coping with it and adjusting ourselves to the present and preparing for the future. In contrast to this, our schools/colleges appear to be conservative institutions that usually lag behind the change. To make education respond to social changes, a curriculum should be framed keeping in mind the following:

- i) Growth of technology
- ii) Structure of family
- iii) Cultural diversity

Each of these is discussed below:

i) Growth of Technology

Today the young are growing up in a world very different from that of a generation or two ago. Added to this is the fact that we are living in an age of information explosion and are enslaved to it. In addition to the creation of new kinds of jobs, the information society will influence other aspects of workplace. At one level, such influences will motivate societies to use computers and other information processing devices to replace manual workers. At another, the locale of the workplace will also be affected. In agriculture and industrial phases, workers have/had to be brought to a central location where goods are/were produced. Given the availability of communications technology, this kind of centralization will no longer be necessary for every activity. One can simply work at home using microcomputers. And, increased value will be placed upon persons who can network their credentials to fill the emerging needs in the information society.

Underlying all this is a serious challenge to the ethics of work that has pervaded our society and schools/colleges. Among the values the school/colleges have promoted are those related to the productive industrial worker-punctuality, loyalty, acceptance, appearance etc. In the decentralized information society, workers will find themselves largely working alone. Setting flexible work patterns, working hours and servicing more than one employer. Furthermore, replaced by new technology, many will have difficulty finding new jobs because they lack certain skills. Curriculum will have to undergo a change in order that it matches with and captures the social changes. [Beane, et. al 1986].

ii) Structure of Family

Family has been viewed as the basis of the complex social fabric. The concept of the family consisting of both natural parents and their children is steadily fading, replacing by a much more complicated diversity of family structure.

For example, separation, divorce and childbirth have given rise to the phenomenon of single parent homes. Geographical mobility is reducing the bonds of the centrally located, extended family of grandparents, aunts, uncles and other relatives.

Traditionally, while men used to go out to work, women managed the home. Now there is large number of families where both the parents work. This has a tremendous influence on the educational institutions.

The school as we know it today evolved in the context of the traditional family structure. Mothers were able to provide a stable and predictable environment, for young people. When children had problems in schools, parents would be called upon to devote time and energy to support the values and efforts of the school. Today, these expectations are no longer certain. As the structure of family has changed, so has its role and function in relation to the school.

Traditionally our lives have been focused on common social features of life and even conformity. Today, however, people have begun to seek more diversity in lifestyles, seeking new pathways and alternative routes. Among the many institutions that are affected by the new wave of individualism and diversity is the school. The reason is that schools have served as major sources for promoting common value among the youth. This new trend in life patterns and values poses serious questions in curriculum planning.

iii) Cultural Diversity

Culture, to the sociologist, is a natural term that includes everything that is learned and manmade. Schools are formal institutions specially set up for the preservation and transmission of culture. Schools seek to discharge this function through the curriculum which is the sum total of learning experiences provided through it.

However, it is observed that society is now moving away from a homogenous culture towards one of diversity and plurality.

The shift in trend can be attributed to the following phenomena:

- Diversity in values and lifestyles (being different is now a socially sanctioned idea);
- Renewed interest in ethnic history (people have developed a new interest in their own history and personal heritage); and
- Development in tele-communications (people have been reminded of their links with cultures in other parts of the world).

However the important feature of curriculum development is how the curriculum portrays cultural values. It has been taken for granted that school curriculum represents a class-free, non-controversial fund of knowledge, which is good for all children in that particular school. Certain schools have tried to transmit what they have assumed as "culture free knowledge, language, sciences, mathematics, arts and crafts, physical education", and so on – which is believed to be needed by one and all for the all round development of one's personality. It is also accepted that those who failed to respond to such curricular treatment, either because of poor home background or other socio-economic reasons, should be given compensatory education to make up for their cultural disadvantages and deprivations. Deprivation, it is now argued, can have meaning only as an economic notion and instead of taking a patronizing attitude by labeling working class children as culturally deprived. The schools reorder their curriculum, taking into account the culture richness and energy of the class of children, who are economically deprived. For example, in India, children with diverse cultural backgrounds study in the same class and follow the same curriculum. They speak different languages, have different food habits and practise different religions, etc. Hence, the curriculum planner has to derive a curriculum that cater to the needs and interest of the different sections of people while at the same time pursuing worth while knowledge, values and skills. In a pluralistic society a common culture cannot be forced on all, since it is accepted that one sub culture or culture is as good (or as bad), as any other. Hence we see that social changes have their impact on curriculum planning. As long as a society is dynamic, the debate over the aims of education will stir up changes, which is the sign of a healthy society. (Beane, et. al. 1986).

Check Your Progress

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

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

6. Considering the changes in contemporary society which three factors should be kept in mind while framing a curriculum?

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14.4.3 Planning for Curriculum Change

With the evolving aims and objectives of education from the turn of the century to the present day, curricula have evolved and resulted in socio-educational changes. For example, in the early twentieth century, the ultimate goal of education was rigorous intellectual training. However, in the second and third decades of the century, progressive educationists emphasized the need for vocational education. Thus curriculum evolved from a purely academic one to one with a broadened scope involving non-academic and vocational components. This reappeared in the latter half of the twentieth century and holds true even now. Thus we can conclude that educational aims should be flexible in accordance with the social needs and should be relevant to the times.

To ensure a socially relevant curriculum, the panels and commissions, which formulate educational priorities, should comprise the following representative groups:

- i) **Students:** Post-secondary students are mature enough to provide appropriate inputs in developing educational aims.
- ii) **Parents:** As parents are interested in the overall development of their children, parental inputs are necessary.
- iii) **Education:** Teachers, administrators and public leaders must assume responsibility in developing educational priorities/aims.
- iv) **Researchers:** The role of the researcher, social scientist is important for providing objective data concerning issues and trends.
- v) **Community members:** Their support in the foundation of priorities should be considered significant as they decide matters pertaining to school/college and fiscal matters directly and indirectly.
- vi) **Business communities:** Because of its economic/political influence and interest in industrial output, it needs to be represented.
- vii) **Political leaders:** They should be enlisted because educational policy and politics, by and large go together.
- viii) **Pressure groups:** People show considerable impact by organizing into groups that promote special interests. The operation of such groups is clearly valid within the democratic process.

In this section we saw that there are various sociological considerations like cultural, economic and political that deeply influence school curriculum – its conception, content and organization. Social forces have a major impact on curriculum development. Any curriculum has to be developed keeping in mind the needs of a pluralistic society and should also take note of the pulls of different social classes in order to prepare students for the world of tomorrow. The curriculum while mirroring a society should also keep evolving the ever-changing social trends.

Having discussed the sociological considerations of designing a curriculum, we now talk about the psychological foundations of curriculum.

14.5 PSYCHOLOGICAL FOUNDATIONS OF CURRICULUM

Psychology is concerned with the basic question – how do people learn? The curriculum specialist, however, asks how does psychology contribute to curriculum? Psychology has provided various kinds of answers for the understanding of the teaching-learning process. As long as teaching and learning are important considerations for curriculum specialist, psychology will be important as well.

Teaching and learning are interrelated and psychology cements the relationship; it provides the theories and principles that influence student, teacher behaviour with in the context of curriculum. For John Dewey, psychology was the basis for understanding how the individual learner interacts with persons and objects in the environment, and the quality of interaction determines the amount and type of learning. Ralph Tyler considered psychology to be a “screen” for determining what our objectives are and how our learning takes place. In short, psychology is the unifying elements of the learning process; it forms the basis for the methods, materials and activities of learning and it subsequently serves as the imputes for many curricular decisions.

In this section we shall be dealing with the major learning theories and their contribution to curriculum development. We shall also touch upon the basic psychological needs of individuals and reflection on their translation into curriculum.

14.5.1 Learning Theories and Curriculum

For the sake of convergence we have classified major theories of learning into the following groups:-

- i) Behaviorist theories which deal with various aspect of stimulus – response and reinforcement scheme.
- ii) Cognitivist theories which view the learner in relationship with the total environment and
- iii) Humanist psychology, which emphasizes attitudes and feelings, i.e. the affective domain of learning.

Let us take up each one of them and examine its contribution to curriculum development.

Behaviourism

Behaviourism is the first school of psychology, which studied the nature of learning. Behaviourists emphasized conditioning behaviour by changing the environment to elicit selected responses from the learner. This theory was predominant in the first half of the twentieth century and has regained currency with the advent of individualized education

Broadly the behaviourists advocate that:-

- Behaviour is likely to be influenced by the conditions under which learning takes place;
- Attitudes and abilities of learners can change or improve over time through proper stimuli;
- Learning experiences can be designed and controlled to create desired learning;
- Selective reinforcement is essential.

Hence we see that behaviourism has a major impact on education. Educators who are behaviourists and in charge of curricula use many principles of behaviourism to guide the creation of new programme.

- i) Remediation, skills acquisition, considerations of basis for advanced learning.
- ii) Well defined short term and long term objectives.
- iii) Appropriate media and materials to suit the learners' abilities.
- iv) Shaping behaviour through prescribed tasks, phase-by-phase activities, close supervision of activities and positive reinforcement.
- v) Diagnosing, assessing and reassessing the learners' need, objectives, activities, task and instruction with a view to improving the curriculum.

Behaviourist theory today is manifested in the theories, principles and trends related to :

- i) behavioural objectives in writing and assessing teaching, learning and evaluation;
- ii) basic skill training programs in language and reading, such as Direct Instructional Training , Survey, Question, Read, Recite, and Review;
- iii) individualized education, such as team assisted individualization (TAI), direct instruction, mastery learning, etc.
- iv) instructional design of system, model, such as instructional systems, management systems;
- v) teacher training programs, such as simulation-teaching, micro-teaching, competency-based teacher education; and
- vi) educational technology, including programmed instruction, computerized instruction.

Many of the traditional and contemporary ideas of behaviour are popular not only in classroom and schools but also in business and industry, government and allied health professions. [Ornstein, A.C. and Hunkins, F.P., 1988].

Cognitive School of Thought

Contrary to behaviourists, the cognitive school of thought believes that learning is cognitive in nature. It explains the phenomenon of human growth and development as cognitive, social, and psychological, and physical Growth and development refer to changes in the structure and function of human characteristics.

Piaget (1950) describes the cognitive stages of development from birth to maturity.

i) Sensorimotor stage (birth to age 2)

The child progresses from reflex operations and undifferentiated surroundings to complex sensorimotor action in relation to environmental patterns. The child begins to establish simple relations between objects.

ii) Pre-operational Stage (age 2 to 7)

The child begins to take on a symbolic meaning for e.g. clothes are to be worn, chair is for sitting etc. shows an ability to learn more concepts as long as they are derived from familiar examples.

iii) Concrete operational stage (ages 7 to 11)

The child learns to organize data into logical relationships and can learn concepts in problem solving situations. However, learning occurs only if concrete objects are available or if actual past experiences can be drawn upon.

iv) Formal operational stage (age 11 to onwards)

Child is able to perform formal and abstract operations..The adolescent can think logically about abstract ideas, formulate hypotheses and deduce possible consequences from them. Learning at this stage has no limitations and the individual can learn according to intellectual potential and environmental experiences.

Piaget's cognitive stage describes learning and development as a process of maturation, which continues and is based on previous growth. The stages follow a hierarchical order and the attainment in each stage varies depending on the hereditary and environmental factors. However the sequence of development as propounded by Piaget remains the same for all individuals. Piaget's learning theories form the basis of curriculum principles propounded by Tyler, Taba and Bruner.

Tyler (1962) propounds three methods of organizing learning experience which were based on Piaget's theory of cognitive development:

i) Continuity

Skills and concepts in a curriculum should have vertical recurrence, which enable the learner to practice those concepts.

ii) Sequence

Understanding of concepts should be in a sequence such that each successive experience builds on the preceding one.

iii) Integration

Curricular experiences should be horizontally interrelated and should be unified in relation to other elements. Concepts in a particular subject should not be in isolation to concepts in other subjects.

Taba reviews Piaget's four stages of cognitive development and analyses their implications for intelligence and mental development. Complex concepts and subject matter should be transformed into mental operations appropriate to the learner's development stage. Taba also takes into consideration Piaget's cognitive process of assimilation, accommodation and equilibration. Taba's curricular experiences are compatible with existing experiences; the concept should be organized so as to move from concrete principles (accommodation) and classifying new relationships/equilibration.

Bruner's structure of knowledge is based on Piaget's concepts of assimilation and accommodation. Bruner's process of learning is similar to Piaget's cognitive processes:

i) Acquisition

Grasping new information, which mainly corresponds to assimilation. The information acquired may be new, or may replace previous information or merely qualify it.

ii) Transformation

It is the individual's capacity to process new information. It corresponds to accommodation.

iii) Evaluation

It determines the extent to which the information has been processed appropriately enough to deal with a problem. It corresponds to equilibration.

It is important for teachers and curriculum specialists to determine the appropriate emphasis to be given to a particular Piagetian stage of development and thinking processes elementary. This is particularly critical for school teachers. It is during this stage of schooling that children move from the second to the third and fourth stages of development.

Most cognitivists specialists are cognitive oriented, because :-

- i) the cognitive approach constitutes a logical method for organizing and interpreting learning;

- ii) the approach is rooted in the tradition of subject matter;
- iii) educators have been trained in cognitive approaches and understand them better.

Even contemporary behaviorists incorporate cognitive processes in their theories of learning. Because learning in schools and colleges involves cognitive processes, and because schools/colleges emphasize cognitive domain of learning, most educators feel that learning is synonymous with cognitive development. As a corollary, problem solving in teaching-learning gains currency. However, in the actual teaching-learning situation, this learning model seems incomplete as something is lost in its translation to the classroom. For e.g., we feel that many schools are not pleasant places for learners and that quality of life in the classrooms can be improved. According to Goodlad, most of the teaching-learning process boils down to teachers' predominantly talking and students' mostly responding to the teachers.

In such a situation what is the role of curriculum specialists?

Curriculum specialists must understand that school should be a place where one is not afraid of asking questions, not afraid of being wrong, not afraid of not pleasing their teachers, and not afraid of taking cognitive risks and playing with ideas. To be sure, schools should be more humane places where students can fulfill their human potentials. With this in mind, let us now turn to humanistic learning (Ornstein and Hunkins, 1988). Having a detailed understanding of implication of cognitive psychology for curriculum, we now move on to humanistic psychology.

Humanistic Psychology

Humanistic Psychology is not considered as a school or wing of psychology by the traditional psychologists. The latter's contention is that most psychologists are humanistic because they are concerned with the people and the betterment of society. Nonetheless, a number of observers have viewed humanist thinking as a "third force" learning theory – after behaviourism and cognitive development. Humanist psychologists emphasize that the way we look at ourselves is basic for understanding our behaviour. Our action and learning are determined by our concept of ourselves. Their ideas are rooted in early field theories and field-ground ideas. These theories view the total organism in relationship to the environment, and the personal meaning constructed in a given situation. Learning is explained in term of the "wholeness" of the problem. Human beings do not respond to isolated stimuli but to an organization of pattern stimuli. Here we can draw a parallel with cognitivism. But what differentiates humanist thinking from cognitivism is that the former stresses the affective and the latter the cognitive aspects of learning, because each individual has specific needs and interests related to his or her self-fulfillment and self-realization.

Maslow's Theory

Maslow, a humanist, has developed a hierarchy of human needs. The needs are arranged hierarchically in order of importance as:

- i) Psychological needs – Necessary to maintain life – Such as need of food, water, oxygen etc.
- ii) Safety needs – Needs to protect oneself or avoid danger
- iii) Love and belonging needs – To have a loving relationship with people and to have a place in society
- iv) Esteem needs – Needs to be recognized as a worthwhile person
- v) Self-actualization needs – To develop into a best person in accordance with one's fullest potential
- vi) Knowing and understanding – Evident in persons with high intelligence who have a desire to learn and organize intellectual relationships.

These needs have definite implications for teaching-learning. For example, if a child's basic needs of love and belonging are not fulfilled, it will not be interested in acquiring knowledge of the world. Maslow's theory has implication for classroom teaching and these are based to some extent on the ideas of Pestalozzi and Froebel who gave importance to human emotions. Maslow is the pioneer of humanistic psychology considering the experience of the child as i) Fundamental to learning, ii) Emphasizing human qualities like creativity, values and iii) Giving importance to the dignity and work of the individual and focus on the psychological development and human potential of the learners.

The teachers and curriculum framers should view the learner as a whole person and learning as a life long process.

There cannot be a generally prescribed humanistic curriculum. Humanistic learning may enhance the mental health of learners, harmonize personal feeling among students and teachers, and improve various aspects of human awareness among students, teachers and curriculum specialist, yet its process is relief mainly on personal experiences and subject interpretations that leave them open to criticisms, Therefore there is a great need to understand what is relevant in humanistic curricula.

Check Your Progress

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

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

7. What do you understand by the term "humanist psychology"?

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8. With which philosophy does humanist psychology overlap?

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9. What does humanist psychology emphasize?

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14.5.2 Transfer of Learning

Formal education is based on the premise that whatever is taught and learnt in the school gets transferred over to life situations and forces to be of functional value to the student. School curricula must, therefore, be based on such content as will promise maximum transfer and develop a knowledge and understanding of matters, which lie beyond what is taught directly.

All theories of learning make assumptions about transfer but different views are held as to how transfer takes place. One view holds that the study of certain subjects assures a general and automatic transfer. It was believed, for example, that the study

of Latin improved intelligence, of Maths, logical reasoning and so on. This view influenced curriculum-selection a great deal in the past and is still an influential force as can be seen by the belief that the inclusion of a particular subject in the curriculum trains a particular faculty of the mind. The second view is based on the premise that transfer is not automatic but is possible only if there are identifiable elements in the content involved in the process of training. Therefore curriculum should be based on teaching specific knowledge and skills. A third view of transfer holds that transfer occurs not by means of specific identical elements but through generalization of the content or of the methods employed in learning of that content. The last view is backed by cognitive field theories of learning and have influenced the modern curriculum considerably. Modern curricula are organized on the principle that understanding of general principles is the key to transfer of learning and that positive transfer depends on how and what an individual learns. The result has been the throwing away from curriculum of meaningless, non functional content and inclusion of such content as would best the nature and structure of the discipline studied.

A staunch advocate of this type of curriculum organization is Bruner. He declares that understanding of the fundamental principles and ideas is the main road to transfer of learning.

14.5.3 Basic Human Needs and Curriculum

Physical and health needs are generally recognized and frequently dealt with through various programmes such as those on fitness, nutrition and health problems. Mental health needs such as those pertaining to acceptance, belonging, security and status have been widely studied but little emphasized in a curriculum.

In this sub-section, we shall touch upon just two points which concern the topic under consideration and discuss the role of each in the enrichment of curriculum:-

- i) Self-actualization
- ii) Development tasks

i) Self-actualization

The concept of self-actualization emphasizes an individual's need for self fulfillment in life by achieving his/her own potential. Curriculum, therefore, should provide such learning activities as will allow the students to identify themselves with those things they can do well. It should also facilitate them to succeed in other activities, which they find difficult. Learners are thus helped to find personal meaning in the learning experience.

Curriculum designers must pay attention to the concept of self-actualization. On the one hand school-based goals are important for the learners, on the other, self-actualization of the learners through fulfillment of personal needs and interests cannot be ignored.

If curricular plans reflect a balance between institutional and personal needs the impact on both may be substantially enhanced.

ii) Development tasks

A development task may be defined as a task which arises in relation to a certain period in the life of an individual, success which leads to his/her happiness and to success in later tasks, while failure leads to unhappiness in the individual and difficulties in sub-sequent tasks. This fact is regarded as one of the most specific considerations in organizing curricula. The needs of individuals are governed by the stage of development and age they have reached, and also grow out of their need to respond to societal expectations. The implication is that the curriculum planners should understand

behaviour manifested by a learner indicating his/her readiness and need to deal with a particular developmental task. As we facilitate the learners' success in these needs/tasks their overall success can be ensured.

Further, in developing a curriculum, the development of an environment in which learners feel genuinely secure, should be ensured. When a curriculum develops such an environment, learning takes place smoothly because the needs of students and what the curriculum provides for are complementary to each other.

We thus see that various psychological considerations deeply influence curriculum planning. In our discussion we dealt with the contribution of major learning theories towards curriculum, the importance of transfer of learning and framing of effective curricula by considering the nature of basic human needs.

14.6 LET US SUM UP

In this unit we have explored the foundations of curriculum construction. We discussed that each foundation is important since it contributes ideas that are crucial in framing the curriculum.

Philosophy heavily influences curriculum development and curriculum planners should be clear about the contemporary dominant philosophy. We have discussed the major philosophies and their implication for curriculum development. We concluded that curriculum specialists need to adopt an eclectic approach. We also discussed the philosophy of Indian thinkers like Tagore, Gandhi and Sri Aurobindo and their contribution to the understanding of curriculum. In our section on social foundations we tried to show that social forces have a major impact on curriculum development. Students should be prepared for the world of tomorrow and the curriculum (while mirroring the society) should keep evaluating the ever-changing social trends.

The discussion on psychological foundations encompassed the predominant learning theories and their influence on curriculum development. It was indicated that curricula could become more effective if they are based on considerations of transfer of learning and basic human needs.

14.7 UNIT-END ACTIVITIES

1. Select some current educational programmes pertaining to gifted and special learners. Identify the way in which the objectives of these programmes are related to the philosophic positions presented in this unit.
2. Identify what you consider to be changes in the kinds of human needs students demonstrate in school today from those recalled from your own experience as a student. In what ways do you see the present day needs as similar or different from those of your own youth. In what ways do you see there is need for schools to change or expand their roles in helping students to meet their present day needs?

14.8 POINTS FOR DISCUSSION

1. Discuss philosophical issues that need to be considered in curriculum planning today.
2. Explain the importance of basic human needs in the planning and development of curriculum.

14.9 SUGGESTED READINGS

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14.10 ANSWERS TO CHECK YOUR PROGRESS

1. The role of teachers according to realists is to impart knowledge to the learners about the world they live in. They believe that the subject expert is the source and authority for determining the curriculum.
2. Philosophy provides the basis of curriculum planning. Curriculum specialists should adopt an eclectic approach and base the curriculum on a philosophy, which is feasible and serves the interests of students and society.
3. Re-constructionists emphasized that role of education is to reconstruct the society based on the needs of society and all classes of people. They moved away from discipline-based education to an education that emphasized cultural pluralism, futurism and internationalism. They emphasized sociology, psychology, and philosophy, not the hard sciences.
4. Perennialism is the most conservative educational philosophy. The curriculum is based on logically organized content and teacher is the supreme authority in that particular content area. According to Perennialists, the students are denied equality

of educational opportunities, if they are provided a different curriculum. There is usually one common curriculum without the scope for elective subjects.

5. Tagore - Emphasis on expression of thought and creativity.
Gandhi – Activity-centred and craft-centred Curriculum.
Aurobindo – Integrated development of personality through integral education.
6. Considering the changing contemporary society, the three factors to be borne in mind are:
 - a) growth of technology
 - b) structure of family
 - c) cultural diversity
7. Humanistic psychology is a concept that involves the study of one's reality.
8. It is based on existentialist philosophy.
9. It emphasizes the affective aspect of learning. Humanists believe the specific needs and interests of children vary.

UNIT 15 CURRICULUM PLANNING

Structure

- 15.1 Introduction
- 15.2 Objectives
- 15.3 Defining Curriculum Planning
- 15.4 Levels of Curriculum Planning
 - 15.4.1 National Level
 - 15.4.2 State Level
 - 15.4.3 System Wide Level
 - 15.4.4 Building or Institution Level
 - 15.4.5 Teacher-team Level
 - 15.4.6 Individual Teacher Level
 - 15.4.7 Cooperative Curriculum Planning Level
- 15.5 Principles of Curriculum Planning
- 15.6 Curriculum Planning Framework
 - 15.6.1 Theories of Curriculum Planning
 - 15.6.2 A General Framework for Curriculum Planning
- 15.7 Development of Specific Curriculum Plans
- 15.8 Learner Involvement in Curriculum Planning
- 15.9 Improvement of Curriculum Planning
- 15.10 Trends and Issues in Curriculum
 - 15.10.1 Irrelevant Curriculum
 - 15.10.2 Emerging Curriculum
 - 15.10.3 Future Trends in Curriculum
- 15.11 Let Us Sum Up
- 15.12 Unit-end Activities
- 15.13 Suggested Readings
- 15.14 Answers to Check Your Progress

15.1 INTRODUCTION

In the previous units of this block you have learnt about the meaning, scope and bases of curriculum. You have studied that curriculum is a diverse field, which involves learning not only about central ideas but also about a range of opinions within each. Having studied the basics we shall now discuss curriculum planning. It is a comprehensive process by which a continuous flow of learning experiences is provided to the learners for their self and societal development. Curriculum planning involves several processes ranging from setting of goals and objectives to actual transaction. This implies that curriculum planning is not about merely preparation of syllabi and courses of study but also an effort for a continuous search for excellence in education. In this unit we shall study how the different curricular components are organised into a meaningful learning package, the different levels of planning and the postulates that guide the process of curriculum planning. The unit also throws light on the decision screens to be considered for organization and effectiveness of curricular plans and on some postulates for improving the curriculum planning process.

15.2 OBJECTIVES

After going through the unit you should be able to:

- define curriculum planning;
- discuss the various levels of curriculum planning;
- interrelate the key elements in curriculum planning;
- identify the decision screens on which are the bases of organizing effective curricular plans; and
- identify means for improving curriculum planning process.

You will agree that though there is no single definition of curriculum planning, you do get an idea of how the term is used to connote various processes associated with curriculum planning.

15.3 DEFINING CURRICULUM PLANNING

The very aim of planning is to bring the context of the future into the present. According to a Chinese proverb, 'Even a journey of a thousand miles begins with a single step'. Hence the destination of a journey becomes the objective, without which the journey would be a directionless and a meandering or unplanned search. Decisions about the future have to be taken in the present and for this purpose, goals are set to meet the future needs. The planning process helps educators to improve their skills for curriculum planning.

Let us try to define the term 'curriculum planning'. The term curriculum has been explained in different contexts. Some of the frequently used terms are 'curriculum planning', 'curriculum development', 'instruction', curriculum organization' etc. Curriculum organization refers to the way in which the intended learning experiences are organized or structured. Curriculum planning is a process in which participants at different levels take decisions about the goals of learning, decide about the teaching-learning situations by which these may be achieved and whether the methods and means adopted are effective. The relationship between the terms curriculum planning and development and often instruction has been expressed by Beane, et. al. (1986) as follows: "We view the relationships among curriculum planning, development and instruction as shown in Fig. 15.1. Each is concerned with the others but each has a major focus. We view curriculum planning as a generic concept that may describe activities ranging from the identification of broad goals to the description of possibilities for specific teaching-learning situations. Curriculum development on the other hand is mainly concerned with the design of plans for actual teaching-learning situations. It is based upon the broad goals and identifies ways to translate those goals into a coordinated and coherent program of learning experiences. Instruction is developed from broad goals and curriculum plans and focuses on methodological questions such as teaching techniques and the implementation of activities, resources, and measuring devices used in specific teaching-learning situations". This is represented in the figure below :

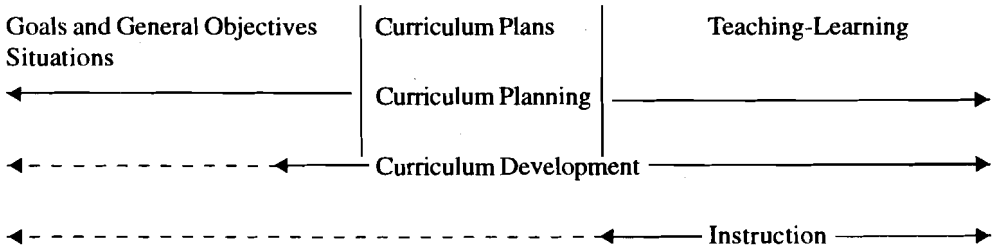


Fig. 15.1: The Relationships among Curriculum Planning, Curriculum Development and Instruction
(Source: Beane, et. al., 1986)

Let us look at a few definitions of Curriculum Planning:

“Curriculum Planning is the orderly study and improvement of schooling in light of stated objectives”.

– Krug, Curriculum Planning (rev. ed.) 1957

Curriculum planning is the process whereby arrangements of learning opportunities or curriculum plans are created.

– Saylor and Alexander, Curriculum for Modern Schools, 1966

Curriculum planning is the process of gathering, sorting, selecting, balancing and synthesizing relevant information from many sources in order to design those experiences that will assist learners in attaining the goals of the curriculum.

– Hass, Curriculum Planning: A New Approach (3rd ed.), 1980

You will see that there is no single definition of curriculum planning. However you do get an idea of how the term is used to connote various processes associated with curriculum planning.

15.4 LEVELS OF CURRICULUM PLANNING

Before we arrive at a definition of curriculum planning let us examine the levels of curriculum planning. Curriculum planning involves decision making at various levels. We shall discuss here curriculum planning activities at seven levels, the national level, the state level, school-system wide level, building level, teacher team level, the individual teacher level and the classroom level with cooperative planning between students and teachers. These seven levels have been given by Beane, et. al. (1986).

These levels represent comprehensively what it means to work on curriculum and will help you to place the meaning of curriculum planning in its proper perspective by identifying the common thread that runs through all of them.

15.4.1 National Level

Curriculum planning at the National Level involves scholars of some particular discipline from various institutions across the country. They discuss and decide how to develop and disseminate a programme, the existing one being either obsolete or inadequate to meet the demands.

The stages involved in the planning process at the national level are:

- Identifying important subject matter, facts, principles concepts, etc.
- Deciding on a sequence in which the subject matter may be taught-from specific to general or from easy to difficult, etc.
- Recommending activities through which students might best learn the subject matter, including experiments, discussions etc.
- Listing supplementary materials for further studies in the particular subject area, and
- Suggesting tests that learners might take to check their progress.

These stages are then put together in sets of teaching/learning materials for purposes of implementation.

The underlying assumption, you would have noticed, is that once developed, such curriculum projects or packages could be put in the hands of teachers and quality education would be assured. The materials, thus produced, are often branded ‘teacher

proof since it is believed that teachers with less than desired skills or knowledge would be working from the plans of scholars/experts, and that the teachers themselves don't have to contribute to the content.

Though we do not have immediate answers with empirical evidence, it is worth considering the following questions.

- Can national level curriculum projects account for the characteristics of learners in local institutions where the projects are supposed to be used?
- Are the subject-area scholars sufficiently knowledgeable about learner characteristics to prepare curriculum plans for use in all the institutions?
- Are subject-area scholars better equipped than teachers to develop curriculum plans in their area of specialization?
- How do national-level curriculum plans influence the professional role of teachers?
- Is it possible to develop curriculum plans that would be successful even when used by relatively unskilled teachers?

15.4.2 State Level

In this scene, a group of educators (teachers, principles, curriculum coordinators, etc) forms a committee under the State Education Department. The task of the committee is to recommend what ought to constitute the overall programme across the State. It, however, depends upon the characteristics of the learners and the broad goals of education. A series of meetings of the group over a course of several months culminates in the production of a model to be sent to all the state institutions for implementation.

The issues pertaining to this level of curriculum planning are:

- Should the local authorities have the prerogative of setting up their own programmes based on local needs and preferences?
- Are statewide programmes and standards necessary to ensure the quality of education for learners across a state?
- Are state level personnel more qualified to develop curriculum plans than local teachers?
- How do state level curriculum guides and mandates affect the role of the teacher at the local level?

15.4.3 System Wide Level

This level involves a group of curriculum planner at district level. It discusses the district level curriculum. The team consists of elementary, middle and high school level teachers, district curriculum coordinator and several citizens.

The team studies and modifies goals of a programme; reviews what students might already be learning, identifies areas for improvement and recommends steps for improvement. This is a district level curriculum planning committee, which reflects on curriculum issues affecting the whole district. It also sponsors curriculum development projects and professional growth activities.

In this context, the following questions could be considered:

1. What are some present problems or ideas in the district that could be referred to the curriculum planning committee?
2. What methods can be used to have a fair representation of various groups such as teachers, administrators and citizens?
3. Which issues the curriculum committee could classify as not appropriate for consideration?

15.4.4 Building or Institution Level

This scenario deals with a group of parents, teachers, administrators, counsellors and students from a particular institution, may be a school, college or university. They are together to evolve a new discipline policy for that institution.

The group works on the basis that a student's encounter with the personal and social experiences is as important as those gathered from the academic activities. Therefore, these personal and social experiences form part of the curriculum. This situation represents a form of curriculum planning that results from the recognition that students learn a great deal from what is termed the 'hidden curriculum'. The hidden curriculum includes such institutional features as governance structure, grouping patterns, grading procedures teacher expectations, etc. Since features like these do result in learning, whether they are planned or unplanned, and so they need to be considered in conscious efforts to plan the curriculum. That is to say, they must be planned in terms of purposes, activities, evaluation devices and so on.

Hence, the issues are –

- Should students be involved on a building-level curriculum committee? If so, in what capacity, and how would student representatives be selected?
- To what extent should the aspects of hidden curriculum be considered to be sources of learning for students?

15.4.5 Teacher-team Level

This scenario deals with a group of teachers representing different subject areas who have come together to develop a unit. This type of activity is known as inter-disciplinary curriculum planning since it involves contributions from various subjects or disciplines of knowledge.

The oft-repeated questions at this level of curriculum planning are:

- What might be the benefits of cooperative interdisciplinary planning?
- What are the factors that are believed to detract from the effectiveness of an interdisciplinary team?
- How might aspects of various subjects be correlated with one another?

15.4.6 Individual Teacher Level

In this case, a teacher tries to make a decision about learning objectives – what the teacher would like a group of students to learn. In the area of subject matter or content, the teacher will have to make decisions about important facts, principles, concepts and learner outcomes that should be emphasized. The teacher must also plan different kinds of activities and resources and ways to measure how well learners have accomplished various objectives. At some time, the teacher may search through various journals looking for ideas about activities, gather background information, or consult other teachers. At the end, the teacher decides on long and short-term objectives as well as the timing of various activities. The teacher must then develop a set of plans for use on a daily or weekly basis. In designing this kind of plan, a number of items must be considered, such as the characteristics of the learners, the sequencing of activities, the appropriateness of various learning materials, and the availability of resources.

We must recognize here that the planning orientation of prospective teachers is often limited to daily lesson planning. All too often, little attention is paid to how these relate to long-term unit plans. As a result, many teachers may have difficulty in understanding the relationship between short and long-range plans and, in addition, may not appreciate the need for the latter. The planning done by the individual teacher is probably the most critical in the range of curriculum planning forms.

As a teacher you might be interested in the following questions:

- In developing curriculum plans for your teaching, do you consider both long and short-term learning objectives?
- What is the greatest problem you encounter in your curriculum planning?
- About how much time do you spend on curriculum planning? Is that time sufficient? If not, how much more do you require? How do you arrange for it?
- What format do you use of formulating curriculum plans? How does your format compare with that of other teachers?
- How often do you teach without having prepared curriculum plans?
- Do you feel the preparation of careful curriculum plans enhances your teaching?
- How often do you depart from your plans in teaching situations?

15.4.7 Cooperative Curriculum Planning Level

This scene deals with a teacher and a group of learners. After discussion, the group draws up a formal set up of plans, summarizing all of its discussions about what might be done.

Here the teacher is guiding a group in formulating plans as to how they might study a particular topic. The teacher and learners work together to decide any combination of the 'what, how, who, where and when' questions regarding the unit they are working at.

Whether one believes its use or not, student-teacher planning does represent a level and form of curriculum planning. Its proximity to the actual group of learners and the possibilities for including learner interests in plans lead some of its proponents to conclude that it is the ultimate level of curriculum planning.

In this context let us consider the following issues:

- In what ways can we involve learners in curriculum planning?
- What factors might inhibit learner participation in curriculum planning?
- What might be the benefits we gain out of learner participation in curriculum planning?
- Should learners play a role in curriculum planning? If no, why not? If yes, what kind of role?

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. List three basic issues pertinent to curriculum planning at the state level?

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2. Briefly describe curriculum planning at the teacher-team level.

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15.5 PRINCIPLES OF CURRICULUM PLANNING

The levels of planning discussed in the previous section illustrate what it means to work on curriculum and thus give some idea of the meaning of curriculum. Let us now examine some characteristics or principles of curriculum planning as given by Beane, et. al. (1986), to arrive at a definition of curriculum planning.

Principle 1: Curriculum planning is concerned with the experiences of learners.

The ultimate purpose of curriculum planning is to improve the learning experiences provided to the learners. Hence it can be concluded that curriculum planning is essentially about learning experiences of learners.

Principle 2: Curriculum planning involves decision about both content and process.

The different levels of planning highlighted the fact that content and instructions are not independent but interdependent concepts. The curriculum planner should be concerned not only with what students ought to learn but also how they learn. Since learning involves doing, curriculum plans without action are incomplete and likewise plans without a purpose will head for aimlessness. Therefore curriculum planning involves decisions about both content and process.

Principle 3: Curriculum planning involves decision about a variety of issues and topics.

The process of curriculum planning focuses on several issues and topics within a particular area of instruction. It involves decisions about goals and objectives of a programme, curricular approaches, programme of evaluation and need for new programmes.

Curriculum planning involves decisions about various issues in relation to each other and not in isolation, for example learning activities are decided in relation to the objectives of the program etc. Therefore, curriculum planning involves decisions about a variety of issues and topics.

Principle 4: Curriculum planning involves many groups.

In the early twentieth century the popular belief prevailed that curriculum planning could be done only by scholars and implemented by teachers. As is evident from the different situations discussed earlier, various participants contribute towards curriculum planning thereby enriching the plans. Educators have realised that curriculum planning is not the sole responsibility of any one group but should involve participation of teachers, students, curriculum administrators, citizens, scholars etc. This would result in a variety of ideas and suggestions and would help to improve the curriculum. The teacher of course remains the key participant in the curriculum planning process and is ultimately responsible for implementing the plan. The underlying principle is that curriculum planning involves many groups.

Principle 5: Curriculum planning takes place at many levels.

We discussed various situations that described various levels of curriculum planning, from the national level to the classroom. In order to focus planning on the specific needs and characteristics of learners it should be done with specific teaching-learning situations in mind. National level planning is as important as local level planning. Planning at various levels ensures participation of different groups. The planning process should strive to achieve goals framed at all levels. It can be concluded that curriculum planning takes place at many levels.

Principle 6: Curriculum planning is a continuous process.

The different situations discussed described different phases of the curriculum planning process. These steps are formulating goals and objectives, defining organizing centers, selection of learning activities, programme evaluations and recommendations for its improvement. The process of planning cannot be compartmentalized, since it is a continuous process, as one process leads to the other. In order that the curricular programmes remain dynamic and relevant, the process should ensure continuity i.e. the curricular programme should be subjected to periodic analysis and evaluation and, based on this feedback, the programme should be suitably modified.

Hence curriculum planning is a continuous process.

In the light of the curriculum planning activities discussed above, a comprehensive definition has been suggested by Beane, et. al. (1986).

“Curriculum planning is a process in which participants at many levels make decisions about what the purposes of learning ought to be, how those purposes might be carried out through teaching learning situations, and whether the purposes and means are both appropriate and effective.”

In the following section we shall try to define curriculum and also try to understand some terms related with curriculum.

15.6 CURRICULUM PLANNING FRAMEWORK

Curriculum planning is a complex process, which involves both convergent and divergent thinking in which ideas are first, generated, the scope is widened and then drawn into set instructional patterns. First the ideas or actions to be used in curriculum planning are described. From these ideas prescriptions are made of what is to be done in curriculum planning.

15.6.1 Theories of Curriculum Planning

Ralph Tyler has offered some suggestions for developing curriculum and instruction. These are considered as the classic tenets of curriculum planning. The four questions raised by Tyler (1950) that need to be addressed for curriculum planning are:

- 1) What educational purposes must the school attain?
(Delineate what is to be taught and how this material is relevant to the common current purposes of schooling)
- 2) What learning experiences can be provided to achieve those purposes?
(The content, processes and methods that will be used to deliver instruction and information)
- 3) What organizational methods will be used in relation to the purposes?
(In relation to the learning experiences, how effectively the instructions and presentations can be organized)
- 4) How will the attainment of the purposes be evaluated?
(Assessment of successful attainment of objectives).

Tyler's questions are basic to the curriculum planning process and have been accepted for the past few decades. This rationale has been the most influential in devising curricular plans. Other theorists like Virgil Herrick (1950) and Hilda Taba (1962) have added to Tyler's model by providing some ideas, which they felt, were imperative for curriculum planning for example knowledge of sources of educational purposes, types of curriculum organizations and means for conducting evaluation. Curricularists like Elliot Eisner (1967) and Herbert Kliebard (1968) acknowledge Tyler's contribution

but find the rationale either too simplistic or too limiting. Learning is a complex journey of how the human brain processes and retains information. Therefore the curriculum planning process also involves a complex set of ideas and processes, which are interrelated and need not follow the linear sequence in that order as proposed by Tyler. Decisions about one set of components influence and have a bearing on the others.

Leslie Owens Wilson in a paper on Curriculum Development, 1997, 2002, has suggested questions in addition to Tyler's that could help in creating a relevant and useful programme.

"Wilson's Additions to Tyler's Principles

1. In the context of students' future needs, be able to justify why you are teaching particular content or processes. (Be able to provide a rationale for *what* you are teaching and for *how* you are using students' time.)
2. Be able to make the content or processes more holistic. (Teach the whole child through instructional techniques and processes, which actively engage multiple modalities and children's minds, bodies, psyches and social consciousnesses. Good instruction needs to be multi-modal and holistic in order to be remembered. This approach creates multiple neural pathways and has a better chance of being remembered and of meeting different types of learning styles.)
3. Be able to make instruction relevant to students' experiences past, present and future lives. (The instructional strategies and content into student's experiences – make it real, make it applicable to their past experiences, their present needs and their immediate futures.)
4. Be able to create more authentic types of assessment. "(Give students connections through meaningful assignments that have direct applicability and carry-over into the real world.)" (Leslie Owens Wilson, 'Curriculum Development', 1997, 2002)

Wilson has suggested that in order to create effective curriculum and instructional designs, Tyler's questions could serve as the basics from where to get started. Wilson's questions could then be used to monitor the instructional relevancy and applicability.

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. Define Curriculum Planning.

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4. What are the four basic questions, which a curriculum planner needs to address for effective planning?

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15.6.2 A General Framework for Curriculum Planning

We discussed in the previous section that curriculum planning is a complex activity and describing it through a linear sequence of events would deny much of the curriculum work that actually takes place. Most of the curricular theorists have taken Tyler's four questions to form the basics of the planning process, but have proposed a "Systems" model in which all components are considered in each step of the process. [J. Galen Saylor and William Alexander (1974) in Beane, et. al., Curriculum Planning and Development, 1986].

The components of curriculum planning have been based upon a general framework. Beane, et. al. (1986) have used the term 'framework' instead of 'model' or 'theory' to avoid the implication of linear process, give an idea of the reality of practical curriculum work and an idea of how the components ought to be considered. They have developed the Curriculum Planning Framework given in Fig. 15.2 based on the theories of Tyler (1950), Herrick (1950), Edward Krug (1950, 1957), and Robert Harnack (1968).

The various aspects of the curriculum planning framework are –

(1) Foundations

Education is based on three foundational areas of philosophy, psychology and sociology, which consider the needs of both individual and society. These three areas have been dealt with in the previous unit of this block.

(2) Goals

The goals of education are based on the above three foundational areas and represent the larger purposes of education. These goal statements are developed at the national, state and district levels. Goals are broad statements based on the purposes and requirements of the educational systems. However a problem often encountered is specific. Curriculum planning is done without considering these broad goal statements. Often goals are viewed as too ambitious statements to be achieved through specific curriculum plans. However broad goals could be realized through general objectives.

(3) General Objectives

All teaching-learning situations are geared to achieve the broad educational goals. As the learner matures from childhood to adulthood, he or she moves through several developmental stages and learning situations. These learning stages contribute to the attainment of educational goals. Since educational programmes are devised according to the developmental stages of the learner, each level contributes to the larger goals. "Statements about contributions at each level to the broad goals are known as general objectives" (Beane, et. al., 1986). Stating general objectives serves two functions:

- i) General objectives bridge the gap between broad goals for education and activities for teachers and learners. What has to be achieved is clear.
- ii) They guide the curriculum planning activity at a particular level.

(4) Decision Screens

Five areas need consideration while deciding about curricular plans for specific teaching-learning situations:

- i) Learner characteristics must be clarified, since plans have to be appropriate for the learners for whom they are intended. The characteristics to be considered are developmental and chronological age, attitudes, interests, previous achievements, learning styles etc.
- ii) Learning principles should be considered while framing curricular plans. Although these principles need not be written down they can be kept in mind to ensure the best learning conditions for the learners.

- iii) The third feature that influences decisions for curriculum planning involves the general resources. These resources are located inside the school and outside also. The school-based resources include money, physical infrastructure, media and outside resources are places of significance which learners visit, knowledge from experts, libraries and other resources.
- iv) The curricular approach that is adopted also has a bearing on the type of teaching-learning situation. That is developed depending on the goals of education the curricular approach could be chosen. The approach could be based on a specific discipline, or on a broad field of various interrelated disciplines, on social problems and fourth on learner needs and problems.
- v) The fifth decision screen pertains to the ways in which the knowledge is organised to create specific teaching-learning situations. Subject matter is always important even though the design focusses on learner needs or social problems. The Curriculum Planning Framework discussed above has been represented in the Fig. 15.2.

Source: Beane, et. al. (1986.)

The framework in Fig. 15.2 does suggest a systematic process, but it does not necessitate the fact that curricular plans move through the elements step by step. However the framework does serve two major purposes:

- i) to check whether all important components are being considered in curriculum planning and
- ii) to ensure that various components are interrelated to one another through evaluation techniques.

Let us now talk about a very crucial stage in the curriculum planning process, i.e. planning for specific teaching-learning situations.

15.7 DEVELOPMENT OF SPECIFIC CURRICULUM PLANS

We have learnt about the various levels of curriculum planning and about the theories of curriculum planning. We shall now explore how groups and individuals actually put plans together. Beane, et. al. (1986) have described a format for curriculum plans in the resource unit. It may include the following components:

1. A unit title (i.e. the organizing centre)
2. A brief rationale statement clarifying the title and describing its importance
3. A brief statement describing the general characteristics of the learners for the whom the plan is intended (age, grade, developmental stage, etc.)
4. A general description of where the particular units fits in the scope and sequence of the total school programme
5. A suggested time frame for the unit
6. A list of objectives
7. Statements of important content on which the teacher and learners will need to focus
8. A listing of activities in which learners may engage to approach the objectives
9. A listing of measuring devices that may indicate learner progress with regard to the objectives
10. Suggestions for evaluation of the unit plan or resource unit

Beane, et. al (1986), have suggested that "curriculum plans may be developed by individuals or by groups. In either case the plans' effectiveness depends upon the

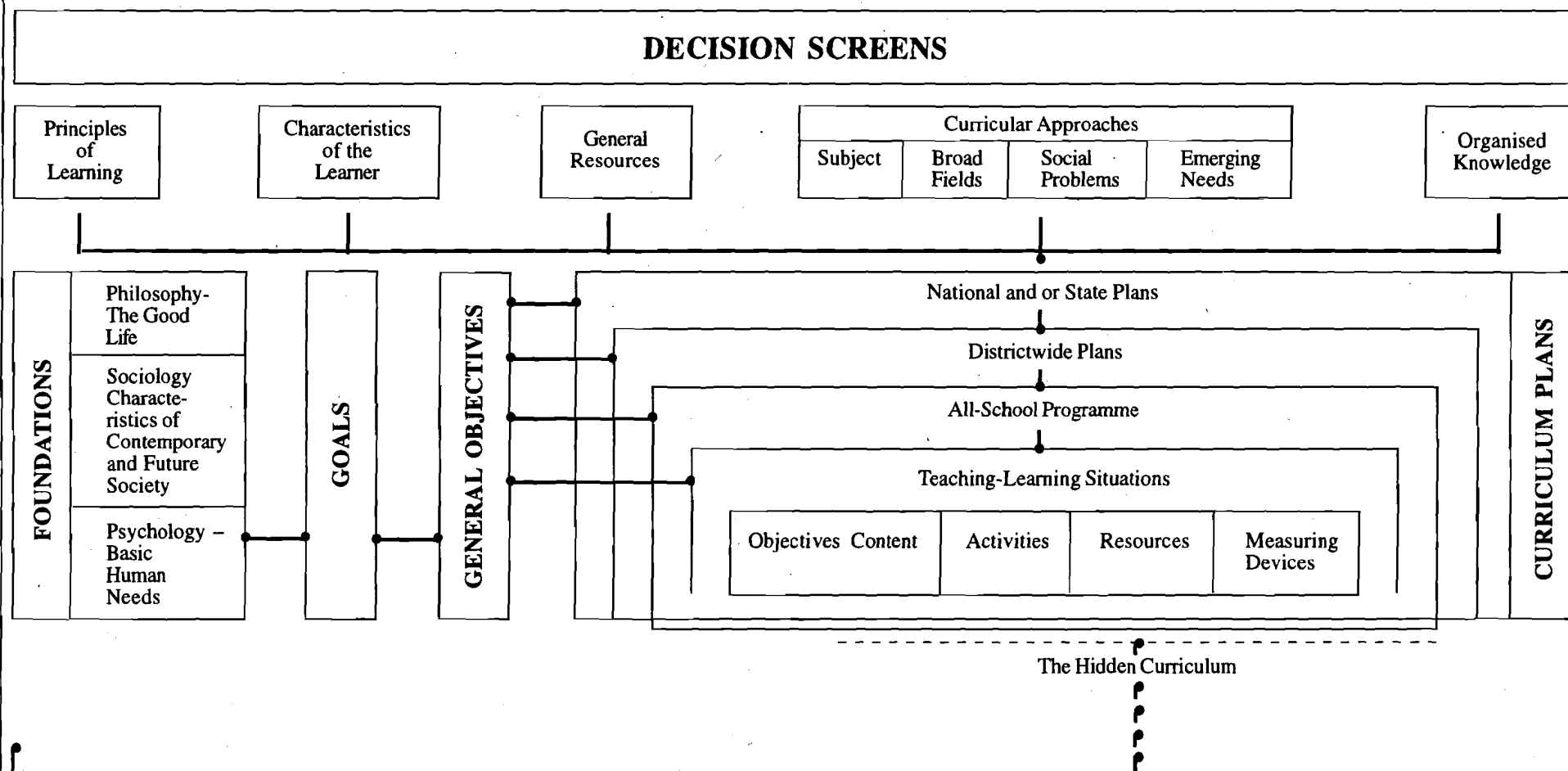


Fig. 15.2: A Framework for Curriculum Planning.

Source : Beane, et. al. (1986)

imagination, experience and thoughtfulness of those who prepare them". They feel group planning is more advantageous than individual efforts. A group provides more ideas and suggestions and hence a balanced view is possible. A group will not function with rigidity, but function in a lively manner and make the process of curriculum planning an exciting exercise and boost the morale of the educators.

15.8 LEARNER INVOLVEMENT IN CURRICULUM PLANNING

In the previous sections we talked about curriculum planning at various levels. In the last three situations, it was a team of teachers, or a teacher planning for a group or a group of learners planning together. The first two cases reflect the realistic role of teachers in curriculum planning and the third category is the less typical curriculum devised by learners. Many curriculumists in the twentieth century have spoken a great deal about learner concerns and interests. They have been strong advocates of a technique called pupil-teacher or teacher-student planning. Although this technique was popularised by Krug, 1957; and Waskin and Parrish, 1967, yet it was criticised by some. The critics were of the opinion that learners should have no say in the curriculum planning as they are not as knowledgeable and hence cannot participate intelligently. However the fact teacher-student planning has been used implies that learners must have some role in curriculum planning. The specific teaching learning situations have several components like organizing, objectives, content, activities, resources and measuring devices. According to Beane, et. al, (1986) the components present possibilities for planning by teachers alone, students alone or both cooperatively. This has been presented in Fig. 15.3. They have described unit planning as the identification of a variety of possibilities within each component. The teachers may define a range of objectives and number of content items, activities, resources and measuring devices related to them. Students could then be involved in selecting from any one or more possibilities in each component for-example the selection of objectives and resources could be done by the teachers but the students could choose the possible learning activities and/or measuring devices. Some teachers even leave the entire process to learners. They may ask learners to decide upon the organizing centres i.e. the title or theme of study and then teachers may help to plan the rest i.e. content, activities, resources related to the organizing centre.

The teacher will decide, based upon student ability, the extent to which a learner should be involved in the process of curriculum planning. Some educators feel that teacher-student planning may be used in some areas and not in others. However since the goal of all schools is to develop self-directed, independent learning, teacher-student planning should be evident as learners progress through the school.

	Organizing Centre	Objectives	Content	Activities	Resources	Measuring Devices
Teachers Planning Alone	●	●	●	●	●	●
Teacher-Student Planning	●	●	●	●	●	●
Students Planning Alone	●	●	●	●	●	●

Fig. 15.3: Whether Students and Teachers Plan Together or Alone, Unit Development involves All Components.

Source: Beane, et. al. (1986).

Beane, et. al. (1986) have listed several advantages of teacher student planning as a classroom technique :

1. It provides a model of democratic living based on cooperative and participatory decision-making.
2. It supports mental health by providing opportunities to have a feeling of belonging.
3. It enhances teacher-student relations by the suggestion that learning is a mutual adventure.
4. It offers a chance for teachers to know what is important and interesting to learners.
5. It enhances social competence by offering opportunities to participate.
6. It offers learners a chance to express their own ideas and interests.

However it is noteworthy that teacher-student planning is not merely a technique. Instead it bases the idea of curriculum planning on the concept of democratic participation.

Before we proceed further answer the following question:

Check Your Progress

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

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

5. Give reasons why group curriculum planning is more advantageous than individual planning.

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15.9 IMPROVEMENT OF CURRICULUM PLANNING

After studying the basics in curriculum planning, we shall now explore how educators can improve the process of curriculum planning. Educators should participate effectively in curriculum planning activities in the given educational environment.

Learning experiences must be systematically organised so that learners can achieve the goals of self and society. Hence educational experiences must be carefully planned. Curriculum planning coordinates the goals with the activities chosen to achieve them. A systematic implementation of curriculum plans still eludes educational institutions. Of course planning does take place from the national to the classroom level, but such activities are often disjointed and do not follow a definite framework of goals and objectives. The process of curriculum planning must be based on some principles. Beane, et. al. 1986 have given the following postulates that must guide the process of curriculum planning :

1. It should be based on the concept of good life, characteristics of contemporary and future society and the basic needs of human beings. This would ensure that curriculum relates to the real world, the society and the humane qualities of people.
2. The essential elements of teaching and learning should be well coordinated so that the effectiveness of teaching and quality of learning is not jeopardised.

3. Curriculum plans should be responsive to the current needs of society and individuals. They should also foresee the future conditions and prepare learners to meet the future needs.
4. Curriculum plans should focus on a broad range of needs of learners and society.
5. The statements of educational goals should be written with clarity so that they may prove useful in guiding the process of curriculum planning. In the absence of such clear-cut goals the plan becomes meaningless and aimlessness sets in.
6. The community at large has the right to identify the goals for its children. Hence educators must inform citizens about foundational areas so that goal decisions are based upon sound knowledge and understanding of the objectives.
7. The right and responsibility to identify programmes for learners rests with educators because of their professional expertise. Suggestions of citizens should be sought on school programmes but the final decision should be made by professionals.
8. Curriculum planning and development are best achieved through a cooperative endeavour. This involves a wide range of experts to understand the complex components of curriculum planning.
9. The curriculum should provide an integrated set of activities rather than provide a set of unrelated educational experiences. It should articulate the school programmes and learners across grades and levels.
10. Curriculum plans should enable learners to integrate their experiences. This is possible only if the school programme has devised a framework which coordinates with all components.
11. The organizational structure should be refined, by individual schools and also at the district level. The structure should facilitate the study of curriculum problems and also suggest improvement activities.
12. Continuous feedback through evaluation and action research help to modify the curriculum plans and makes them dynamic.
13. Curriculum planning should involve democratic participation right from citizens to learners. Citizens could participate for goal identification and learners for deciding about specific teaching-learning situations.
14. The teacher is central to the curriculum planning process and is responsible for decision making. Curriculum plans are ultimately implemented by the teacher. The teacher can observe changes in the learner characteristics and needs in relation to the plans.
15. Curriculum decision-making should be continuously evaluated. All content and process related activities must be analysed.

The above postulates must guide the curriculum planning process.

You will agree that the search to improve school curricula is a continuous process which reflects certain issues and trends that impact on schools and society. In the following section we shall examine some curricular trends that curriculum workers have to grapple with.

15.10 TRENDS AND ISSUES IN CURRICULUM

Ornstein and Hunkins (1988) have spoken about several curriculum issues. Let us look into two broad curricular issues: (i) Irrelevant Curriculum and (ii) Emerging Curriculum and possible future trends.

15.10.1 Irrelevant Curriculum

The school curriculum is often criticised for being irrelevant. When we say that curriculum is irrelevant it means that it does not meet the needs of society or learner,

implying the need for modification of content. The irrelevance of curricula can be considered in two ways –

- i) The curriculum is fixed and not relevant to society.
- ii) The curriculum is trivial which implies that knowledge by way of facts, figures is remote and meaningless and not relevant for students.

a) The Fixed Curriculum

This suggests that changes in society are directly related to changes in the curricula. Dewey (1916) has interpreted the curriculum as experience, which links curriculum to perpetuating, transferring and reconstructing society. Dewey felt that "The scheme of a curriculum must take into account... the intention of improving the life we live in common so that future shall be better than the past". The curriculum should reflect the culture of society. It should portray what people in a particular society think and do. The need for curricula to be relevant is underscored by the fact that there is knowledge explosion and change is rapid. Some educators feel that curriculum becomes obsolete every few years. Bentley Glass (1979) believe that the rate of obsolescence of scientific knowledge equals that of an automobile. That means knowledge increases exponentially and that our curricula do not consider these changes and our resources are limited. It, however, does not consider that trends change and rate of change varies over time. Ornstein and Hunkins, (1988) believe that "new knowledge is assimilated as existing knowledge is revised and modified to accommodate it". Similarly the existing subject matter accommodates the new content and new teaching learning situations are merged with existing ones to create new approaches. The curriculum cannot afford to remain fixed and should be subject to modifications in this world of change. This will maintain the health and vitality of schools.

b) Trivial Curriculum

A trivial curriculum is one that lays great emphasis on rote learning and irrelevant facts and figures that students are forced to learn. For example, teachers may ask students to memorize the capitals of each State of India, names of all Indian Presidents, the lines of a poem, etc.

This kind of meaningless teaching occurs at the cost of useful academic time which could be utilized instead for teaching some other content. Most of the students go through the vigours of rote learning throughout their school and college lives and forget the knowledge acquired. More than 75 per cent of various kinds of facts learned in a subject is forgotten over a twelve month period of time (Tyler, 1934). Of course, this loss of retention varies with students of differing ability and across various stages of education. For example, college students do better than elementary school students. Learners tend to forget within minutes what is perceived by them as trivial or useless. Instead of memorizing a host of meaningless facts, meaningful learning takes place if the curriculum relates to the learner's previous knowledge is useful, and if it can relate to the personal experiences of the learner.

Trivial facts and figures are of little value to adults and so they cannot be meaningful for children. Information, like names of Presidents, coefficients of angles etc. can be made meaningful if it relates to existing ideas in their cognitive and affective backgrounds. But if it is forced because of the requirements of a rigid curriculum then the facts learnt are easily forgotten. Instead, the focus of educators should be to help students shift away from random memorization of facts to develop useful concepts and problem solving skills. The time that could be utilized for actual learning is wasted in rote learning. Through a trivial curriculum students can at the most retrieve information to pass exams or impress teachers. Retrieval of information can be best achieved through computers and teachers should encourage learners to think and engage them in problem solving activities. (Ornstein and Hunkins, 1988.)

15.10.2 Emerging Curriculum

An emerging curriculum is one, which is constantly evolving and includes the upcoming and new areas of study. It is a dynamic curriculum and changes according to the needs of the individual and society. Such a curriculum reflects the social and political changes and is learner centred.

Let us now study some examples of how emerging societal trends influence curricula.

i) Liberal Education

It is in contrast to the old concept of authoritarian education in which learning and instruction was teacher controlled. The teacher was the final authority and students were passive recipients of knowledge without any individual freedom. Liberals contend that the aim of education is to liberate the learners' minds and should be provided to all without discrimination. The focus of modern curricula is natural and modern science and modern languages. It is a democratic approach to teaching-learning and fosters creativity and self-expression in the learners.

ii) Global Education

Learners have to understand that they are a part of an ever-changing world. They must be aware of the global changes and phenomenon that have resulted in global interdependence. Global education is a response to this need of the world to understand the evolving global systems. Students must understand that every aspect of human life has global implications, whether it is clothing, transport, clean drinking water, pollution or any other human activity. The students should be able to gauge the degree and pace of changes in the world. The preparedness for such changes will necessitate the development of such skills as problem solving, decision-making, creative thinking etc. The global education curriculum should provide a global perspective to learners since it strives to achieve the aims of global education which ultimately prepares learners for facing the global realities.

iii) Interdisciplinary Education

The present curricula are no longer compartmentalised into rigid subject areas. In fact the present curricula are deviated from traditional watertight compartments into broad discipline areas. Several subject areas have converged to produce broad subject fields such as biochemistry, environmental studies, bio-informatics business mathematics etc. The interdisciplinary approach will facilitate a better understanding of the key concepts of the subject matter and inculcate effective skills for solving problems of the society.

iv) Education for Secularism

Most of the societies in the present day world are secular i.e. people of various faiths and religion live together. Societies abide by democratic principles and members of society are free to practice religion of their choice. This is reflected in the schools, where students belong to different faiths and religions. The state fosters secular culture among the students through its curriculum. Imparting religious instruction may breed discontent and internal trouble within institutions. Liberals forwarded the concept of secular education, which was accepted by the church and clergy. They replaced the traditional religious aspects of the curriculum with scientific understanding of the universe and a greater awareness of political, economic and cultural aspects of the society.

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.

6. List two advantages of teacher-student planning as a classroom technique.

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7. On what basis can you gauge the irrelevance of curricula?

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15.10.3 Future Trends in Curriculum

One of the aims of education is to prepare the individual for the future. Hence the curriculum planner must bear in mind the future needs and assess the possibilities of curriculum development for the future. The curriculum planner has to address questions like the role of education in society, influence of curriculum on the future of society and participation at various levels for effective curriculum planning for the future. Curriculum planning for the future is imperative because of demographic changes, technological innovations, social changes and cultural changes.

These changes have influenced the Indian society. Schools have to respond to the changing socio-political pressures and hence curricula must equip the learners with the basic skills such as understanding others, learning skills, continuing education, participation in the economic world etc.

Impact of Information and Communication Technology

The world and our country as well is under the impact of information and communication revolution. This has put severe demands on curricula at all levels to keep learners abreast of the latest developments on the one hand and to equip them with such skills as will enable them to harness that information on the other. This will definitely change the pattern of learning inputs and gear the curriculum to match the changing needs and learner characteristics.

Distance Education

Distance education has emerged as an alternative to the formal face-to-face mode of learning. This is in response to the increasing demand for continuing and lifelong education. It is also here to supplement the formal system of imparting education. Distance education curricula are focussed on learner needs, placed according to learner's ability and flexible to accommodate the place and time of study of the learners. The teachers prepare the instructional materials, both print and non-print to influence learner behaviours. There is also provision for human interaction. Such a learning mechanism is useful for the highly motivated learner and curricula encourage self-learning and self-activity.

15.11 LET US SUM UP

This unit has been concerned with the concepts and skills of curriculum planning. It has focussed on how educators can use these skills at various levels to enhance the experiences of learners. Curricula which foster this capacity are able to address in a better way the needs and characteristics of learners and society. We illustrated different forms of curriculum planning and how these are utilised at different levels.

Our discussion was also focussed on arriving at a definition of curriculum planning and some related terms to ensure effective participation in the curriculum work. The components of curriculum planning based on a general framework were analysed. The framework would help curriculum planners to incorporate the important elements of the curriculum and also serve as an evaluation tool.

The actual process of developing curriculum plans was discussed stepwise and how learners could be involved in the process of curriculum planning. The entire process of teacher-student planning is based on the premise of democratic participation. Curriculum planning should be a dynamic phenomenon and so it should incorporate from time to time changes and modifications according to the changing needs of society and learners. Several postulates were cited that could possibly guide the process of curriculum planning. We noted some curriculum trends and issues that have a direct bearing on the curriculum. Irrelevant curricula are a reminder of some miseducative classroom experiences. Broad educational concerns addressed by emerging curricula are – Liberal education, global education, interdisciplinary education and a study of possible future trends.

15.12 UNIT-END ACTIVITIES

1. Select a subject from the secondary school curriculum. Identify objectives, select contents, suggest possible instructional activities and evaluation mechanisms.
2. Discuss what current social trends you feel are most likely to continue in the immediate future. What new social trends do you believe will emerge in the future? How will those social trends affect the school curriculum?

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15.14 ANSWER TO CHECK YOUR PROGRESS

1. Three pertinent issues for curriculum planning at the state level are:
 - The prerogative of local authorities to set up programmes based on local needs.
 - State level personnel more qualified than local teachers to develop curricular plans.
 - Quality of education for learners across a state to be ensured through state level standards.
2. Curriculum planning at the teacher team level involves interdisciplinary curriculum planning since teachers from various disciplines contribute their knowledge. Different aspects of the subjects are correlated to evolve a curricular plan.
3. Curriculum planning is a process in which decisions are taken at several levels about the purpose of learning, teaching-learning situations, organizing these activities and to ascertain the effectiveness of these activities in achieving the purposes.
4. The four basic questions for curriculum planning are:
 - a) What educational goals are to be attained?
 - b) What learning experiences are to be provided for attaining the goals?
 - c) How the methods and strategies are to be organized?
 - d) How will attainment of goals be evaluated?
5. Some educators feel that group planning has more advantages than individual planning because a balanced set of ideas and opinions can be obtained from the group. The group can make the atmosphere more lively and exciting and thereby motivate the participants for developing effective curriculum plans.
6.
 - i) It fosters the concept of democratic living.
 - ii) It improves teacher-student relations since they work together.
7. Irrelevance of curriculum can be considered on the basis of -
 - i) when the curriculum becomes fixed and rigid.
 - ii) when the knowledge imparted emphasizes mainly rote learning of facts, figures etc.

UNIT 16 MODELS OF CURRICULUM DESIGNING AND DEVELOPMENT

Structure

- 16.1 Introduction
- 16.2 Objectives
- 16.3 Components of Curriculum Design
- 16.4 Sources of Curriculum Design
 - 16.4.1 Science as a Source
 - 16.4.2 Society as a Source
 - 16.4.3 Knowledge as a Source
 - 16.4.4 Learner as a Source
- 16.5 Dimensions of Curriculum Design
 - 16.5.1 Scope
 - 16.5.2 Integration
 - 16.5.3 Sequence
 - 16.5.4 Continuity
 - 16.5.5 Articulation and Balance
- 16.6 Curricular Approaches
 - 16.6.1 Subject Area Approach
 - 16.6.2 Broad Fields Approach
 - 16.6.3 Problem Centred Approach
 - 16.6.4 Learner Centred Approach
- 16.7 Models of Curriculum Development
 - 16.7.1 Technical-Scientific Models
 - 16.7.2 Non-technical Non-scientific Models
- 16.8 Basic Tasks of Curriculum Development
 - 16.8.1 Establishing the Philosophy
 - 16.8.2 Assessing Needs
 - 16.8.3 Formulating Goals and Objectives
 - 16.8.4 Selecting the Content
 - 16.8.5 Organizing the Content
 - 16.8.6 Selection of Curriculum Experiences
 - 16.8.7 Evaluation of the Curriculum
- 16.9 Let Us Sum Up
- 16.10 Unit-end Activities
- 16.11 Suggested Readings
- 16.12 Answers to Check Your Progress

16.1 INTRODUCTION

In the previous units, you have learned that curriculum is a plan for learning. It is based on a philosophy and has a basic organization. In other words it has two major attributes – vision and structure. Every curriculum reflects a ‘vision’ or philosophy

about the purpose of education in society. The curricular vision is translated into an organised structure or planned experiences for the learner, by which the learner interprets the role of education.

The concept of Curriculum Design refers to the arrangement of the elements of curriculum into a holistic plan. The organisation, which someone selects, is actually determined by his or her curricular philosophy. The curriculum development process always consists of a basic four-step cycle – (1) analysis of purpose, (2) designing a programme, (3) implementing the experiences in learning and (4) evaluating the process.

In this unit, we shall discuss the modes of Curriculum Design and Development in detail. We shall deliberate upon the sources of curriculum design and how such sources influence education. At this point we will also view the curricular design on various dimensions and workout the representative curricular designs. We also need to understand the scientific steps involved in the process of curriculum development.

16.2 OBJECTIVES

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

- identify the components of curriculum design;
- explain how the sources of curriculum design influence the curricular pattern;
- describe the dimensions of curriculum design;
- discuss the approaches to curriculum development;
- differentiate between the technical and non-technical models of curriculum development; and
- identify the basic steps involved in the process of curriculum development.

16.3 COMPONENTS OF CURRICULUM DESIGN

As mentioned earlier the four components of a curriculum design are: (1) purpose – i.e. aims, goals and objectives, (2) design of subject matter (3) implementation of the learning experiences and (4) evaluation approaches (Ornsatien and Hunkins, 1988).

The manner in which these four components are arranged determines the design of the curriculum. Often one component is given more weightage than the others. However, most curricular designs lay more emphasis on context subject matter while others focus on learning activities. The interrelationship among these four components of curriculum design has been given by Giles, et. al. (1942) in a diagram (see Figure 16.1). These have used method and organization instead of learning experiences.

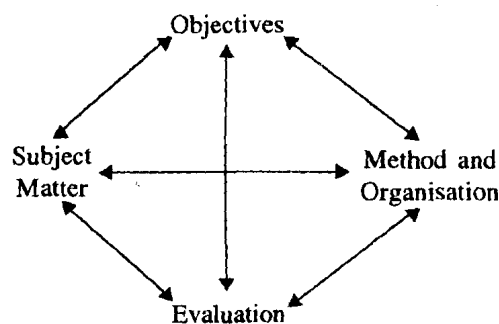


Fig. 16.1: The Components of Design.

Source: Giles, et. al. (1942).

A curriculum designer is thus confronted with four basic questions: What is expected to be done? What content is to be included? What strategies, resources and activities will be employed? How will the results of such a design be appraised? The paradigm presented by Giles, et. al. (1942) suggests continuous interactivity between the four components i.e. decisions made about one component will influence the other.

A philosophy is essential for curriculum development. This involves theoretical and practical issues which will influence an individual's selection of goals and objectives of education, have a bearing on the content and its organization, determine the pattern of delivering the chosen content and also guide their judgement about the evaluation procedures to be adopted.

"If a curriculum is designed adequately, it defines for the curriculum decision maker the nature and scope of the components in the curriculum that are to receive particular attention. Hilda Taba noted that most curriculum designs contain Giles' four components, but many lack balance, because the elements are poorly defined or are not considered in relation to a theoretic rationale" (Ornstein and Hunkins, 1988).

16.4 SOURCES FOR CURRICULUM DESIGN

The curriculum designer must have definite philosophical and social views on education. In other words, these views are their sources of curriculum and determine the manner in which they influence the course of education. A curriculum lacking in such social and philosophical orientations will be a confused curriculum.

16.4.1 Science as a Source

A curriculum has a scientific basis when its elements are observable and measurable. The method of scientific inquiry is adopted to arrive at truths. The curricular components are derived from scientific ideas.

16.4.2 Society as a Source

Education has the power to change or improve society. Analysis of the existing social situation can form the basis of curriculum. Those curriculum designers, who consider school as a miniature of society, strongly believe that curriculum should be based on an understanding of society.

Dewey believed that society should be considered as a source for curriculum design. He wrote, "Whenever we have in mind the discussion of a new movement in education, it is especially necessary to take the broader or social view" or else the change will be "looked at as the arbitrary inventions of particular teachers, at the worst transitory fads, and at the best merely improvements in certain details." (J. Dewey, 1900) Some curricularists believe that a curriculum should enable individuals to make a place for themselves in society. Others believe the curriculum should evolve in response to government policies and decisions. Reconstructionists take a different stance: curriculum should facilitate change or improvement of the social order. The reconstructionist point of view has its origins in Dewey's book "Reconstruction in Philosophy" (1920). The belief that schools could change society if they had the will to do so is expounded by George Counts (1932) in a booklet called, "Dare the Schools Build a New Social Order?" The implications of the content were that teachers should envisage their role as agents for social change through the curricular contents (Ornstein and Hunkins, 1988).

16.4.3 Knowledge as a Source

Knowledge from other fields of study and not merely science can be interpreted on the basis of the source of curriculum-content from other fields of study apart from

science cannot be ignored. Hence if the domain of knowledge itself is considered as the source of curriculum then no particular content will be left out. According to Hunkins (1980), knowledge is perhaps the only source of curriculum, and that society and what we know about learners really serve as filters in the selection of content.

Knowledge may be structured in different ways – disciplinary and interdisciplinary. Disciplined knowledge has content organised into a particular structure, which is unique to that discipline, for example, Physics or History. The methods of inquiry, which expand its domain, are specific to that discipline. Undisciplined knowledge does not have a unique content, but content is taken from different disciplines and clustered around a focus of investigation. For example Bio-informatics, Bio-technology etc.

16.4.4 Learner as a Source

In this process the individual is of primary importance. The child is an individual who should be motivated to create his or her own ideas and not depend on that of others. The curriculum thus becomes learner centred and experience centred, and the nature of education is determined by how the learner learns, forms attitudes, values, develops interests. Individuals should not be compelled to fit into certain programmes or conform to the interest of others. In this curricular design, the teacher assumes a non-directive role. The teacher is a partner in learning and can serve as a facilitator or resource for the individual's learning process.

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. a) What do you understand by the term curriculum design?

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b) How does society influence curriculum design?

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16.5 DIMENSIONS OF CURRICULUM DESIGN

From the previous discussion it must be clear that curriculum design is a statement reflecting the relationships between the curricular components. However, a curriculum design has to be developed on the basis of certain dimensions like Scope, Integration, Sequence, Continuity, Articulation and Balance. These considerations will determine the shape of the curriculum, the kind of learning experiences it will provide, its extent, organizing content into a useful sequence, etc. Let us now examine these considerations for curriculum design.

16.5.1 Scope

According to Saylor et. al. (1981), scope is defined as, "the breadth, variety and types of educational experiences that are to be provided to pupils as they progress through the school programme. Scope represents the latitudinal axis for selecting curriculum experiences." Scope of a curriculum design determines the depth to which the subject matter has to be dealt with, the type of learning activities to be provided and decisions about the arrangement of curricular components.

16.5.2 Integration

Learning becomes meaningful when content from one field (Physics) is interrelated with content from another (Chemistry). The major task confronting a curriculum designer is to integrate learning experiences of the learner at a particular level of the curriculum. "It is an attempt to interrelate content with learning experiences and activities to ensure that students' needs are met." (Hunkins and Ornstein, 1988). This refers to the horizontal relationships among various themes or topics in different subject areas.

16.5.3 Sequence

While arranging the components of curriculum a vertical sequence should be followed, i.e. there should be a vertical relationship between the curricular elements so as to enable continuous learning. There has been a longstanding debate over whether the sequence of content and experiences should be based on the logic of subject matter or on the way in which individuals process knowledge. Those who believe in arranging curricular components on psychological principles have based this belief on researches in human growth, development and learning. Piaget's research has provided a framework for sequencing content and activities and relating expectations to what we know about how individuals function at various cognitive levels. Kohlberg's research has provided a similar service regarding individuals' moral development and the ways in which individuals process types of moral issues and concepts (Hunkins and Ornstein, 1988).

Based on well-accepted learning principles, Smith, Stanley and Shores (1957) have given four bases for sequencing content. These are: -

- i) **Simple to complex learning:** From teaching two digit addition to teaching five digit addition.
- ii) **Part to whole or pre-requisite learning:** From teaching digestive system to teaching the entire human body systems.
- iii) **Whole to part:** Teaching the concept of 'animal' and then teaching the concept of a 'dog'.
- iv) **Chronological learning:** Chronological occurrence of historical events.

16.5.4 Continuity

Continuity implies the repetition of such skills or ideas in the curriculum about which the learners should have in-depth knowledge. That means over a period of time the same kind of skills be brought into operation. For example if the concept of addition is to be developed then content should provide recurring opportunity or exercises on addition to be practiced.

16.5.5 Articulation and Balance

Articulation refers to interrelatedness of concepts of a curriculum. The relation can be either vertical or horizontal. Vertical articulation occurs when certain lessons, topics

or courses are related to those occurring later in the curriculum sequence. For example the tenth grade chemistry curriculum could be designed so as to interrelate the concepts of Atomic Structure with those of Radioactivity. Horizontal articulation occurs between curricular components simultaneously. For example, when curriculum designers interrelate concepts of eleventh standard History and Political Science or Political Science and Sociology. However, interrelationships between subjects can be established only with difficulty. Hence it is difficult to achieve articulation in a curriculum.

Curriculum designers are also concerned that appropriate weightage be given to every aspect of the curriculum, so that a balanced curriculum emerges. A balanced curriculum is one that helps the learners to gain knowledge and utilize it to achieve their goals. Hence various curricular components, like subject matter, learning activities, learner interests, attitudes, values etc. should be given due consideration for optimal learning, based on learners' needs. A fully balanced curriculum is difficult to achieve since schools are slow in adapting to the changing needs of individuals and society. Often one subject area is stressed more than the others depending on local fads and social and political pressures. There are no objective decision screens which influence the curriculum design. Having discussed the different dimensions of curriculum design let us look into the various curricular approaches which would be representative of a curriculum design.

16.6 CURRICULAR APPROACHES

A given teaching-learning situation focuses on a particular type of learning activity: mastery of subject matter, addressing a social problem etc. How these learning situations are organized indicates a curricular approach.

"A curricular approach is defined as a pattern of organization used in making decisions about the various aspects of a teaching-learning situation." (Beane, et. al. 1986).

These approaches are categorized into four major groups –

- i) Subject Area Approach
- ii) Broad Fields Approach
- iii) Problem Centered Approach
- iv) Learner Centered Approach

The choice of a particular approach for curriculum development reflects the following:

- The selection of objectives
- The use of subject matter or content
- The type of learning experiences to be provided
- The role of teachers, learners and the organizing center for the teaching-learning situation
- The choice of method for providing the learning experiences

Let us now discuss the curricular approaches in the order given above:

16.6.1 Subject Area Approach

One of the most widely used curricular approaches is the subject-centered approach. In this design the curriculum is planned around separate subject areas or disciplines. The popularity of this approach is rooted in the fact that knowledge and content have a very strong tradition in our culture and are thus accepted as integral parts of the curriculum. The subject design is the oldest and best known to teachers and the common man. In this the school programme is divided into subject areas of English, Mathematics, Social Studies, Music, Art and so on. Mastery of the subject matter and skills in that

area form the basis of learning objectives. Teachers are also trained as subject specialists and subject matter is drawn from within one subject area. "An early spokesperson for the subject curriculum was Henry Morrison. Morrison (1940) argued that the subject matter curriculum and literary skills should be the focus of the elementary curriculum. This orientation to subject matter reflected a mental discipline approach to learning and a perennialist orientation to subject matter. Morrison also felt that such a design could allow a student at the secondary school level to develop interest and competence in one subject area. However, he proposed that a variety of courses should be offered to address the needs of different students. This approach defines important learning in terms of subject matter from existing disciplines.

16.6.2 Broad Fields Approach

Another method of organizing curricular components is combining two or more subjects from related fields into a broader field. The popularity of this approach in recent times is due to the following reasons:

- i) Curriculum is not compartmentalized into rigid subject boundaries. Hence the information becomes more meaningful to the learners.
- ii) Teachers have greater flexibility to choose content.
- iii) Learners can see the interrelatedness of various subject areas in the curriculum. They can generalize knowledge across broad areas.

The Broad Fields Approach combines separate subjects from within a domain of knowledge. An example of such a correlation could be the Humanities programme which may be a combination of Literature, Art, History, and Music. or sometimes knowledge from two entirely different fields could be blended e.g. multi cultural education is a broad field area, which draws information from Sociology, Psychology, History and Anthropology.

However this approach does pose a problem. A question arises as to whether students gain only a superficial understanding of the various concepts in the broad field areas. The field learner would learn concepts from the interrelated disciplines, i.e. breadth of knowledge would be more, but may not attain depth. Curricularists do agree that correlation among some subjects is required to establish linkage among them and avoid rigid compartmentalization of the curriculum e.g. Science and Maths can be correlated because Maths forms an important tool for dealing with scientific content.

16.6.3 Problem Centered Approach

The third major type of curricular approach is the problem centered one, where curriculum is organized on major problems in society. These designs focus on the problems of the society and of the individual. It focuses on the problems of living. Although this approach is concerned with individuals in a social set up yet it is different from learner-centered approach. However at some stage such a design may have to cater to the needs of learners because it deals by and large with problems of human life in their social set up.

Problem centered curriculum designs are designed to address societal needs that are unmet and also for preservation of culture. For example, courses may be developed on environmental problems, technology, racism, futurology, etc. The learning objectives are framed to analyze the problem or issue and content drawn from the subject area pertinent to the issue. Very often the content does cut across the subject areas but is well within the needs and abilities of the learners. The primary objective of using this approach is to create in the learners an awareness of crucial social issues and develop skills to help solve such problems. Some problem centered approaches focus on persistent life situations, others deal with contemporary social problems, some address areas of living and some with the reconstruction of society.

Some educators feel that curriculum should focus on contemporary social issues and should aim at reconstruction of society. Such educators consider themselves as social reconstructionists. They feel that if curriculum is geared to the social, political and economic development of society then a social change can be effected to create a better and more equitable society. In other words, curriculum should enable social change, through the agency of school.

16.6.4 Learner Centered Approach

All curricularists believe that curricula are valuable to students. At a time when most educators emphasized subject matter for designing curricula, these educationists asserted that learners should be the focus of all curricula. They emphasized that all school learning should be geared around the needs, interests and abilities of the learners. The major purpose behind this approach is to help learners come to grips with issues in their lives and be prepared for the present. Much of this philosophy has its origins in Rousseau’s book “Emile” published in 1762. Rousseau was not for “Child anarchy”. He wrote that when a child is nearing adolescence, “much skill and discretion are required to lead him towards theoretical studies.” He believed that teachers should provide learners the opportunity to explore nature and learn on their own. “Put the problems before him and let him solve them himself. Let him not be taught science, let him discover it.” (Rousseau, 1911). This approach also draws from thoughts of philosophers like Froebel, Pestalozzi, They are proponents of the philosophy of learning by doing. For example to teach geography, the students should be taken for field trips to teach them map work and by making sketches of landscapes. While the topics of study may be organized and planned by teachers, learning would occur spontaneously from discussions among pupils and teachers. The above child-centered design, which is attributed to Dewey, was actually conceived by Parker. Parker (1894) believed that the method of instruction should be patterned on the child’s natural approach to learning. Dewey like Parker believed that education was a social process by which an individual could achieve social aims.

We have discussed the four major approaches to curriculum design. Let us now study some models of curriculum development.

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.

2. List four curriculum design dimensions.

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3. What are the features of Broad Fields Approach to curriculum design?

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16.7 MODELS OF CURRICULUM DEVELOPMENT

The success of our educational endeavours rests on careful planning, without which disorder and chaos will result. The need to plan effective curricula cannot be denied. From such curriculum plans a model for curriculum development will emerge. For the construction of a curriculum, thought has to be given to goals, content, learning experiences, methods and evaluation. Curricular approaches also focus on different aspects like subject matter, learners and society. Hence there are various ways to define curriculum development for which several models can be developed. Most models can be classified as either technical or scientific models and non-technical or non-scientific models. The classification of a model as non-technical or non-scientific should not be seen in a negative light. Instead those educators who emphasize subject matter approaches adopt the scientific or technical approach to curriculum development. Advocates of learner-centered and problem centered designs formulate non-technical or non-scientific curriculum designs.

Let us look into these approaches and study the models characterized by them.

16.7.1 Technical-Scientific Models

According to this point of view, "Curriculum development... is basically a plan for structuring the environment to coordinate in an orderly manner the elements of time, space, materials, equipment and personnel." (Feyereisn, et. al. 1970.)

The curriculum can be comprehended from a macro or broad point of view and its prime objective is the education of the individual. It enables the educationists to work with a plan in mind. Curricula can thus be planned to achieve optimal student learning, through a scientific organization of its components into a complex unit. Let us discuss three models under the Technical-Scientific Approach.

- Taba's Model
- Goodlad's Model
- Hunkins's Developmental Model

Taba's Model

Hilda Taba advocated that those who use curriculum should be the curriculum designers as well. She believed that teachers should create specific teaching-learning situations for their students. They should adopt an inductive approach to teaching i.e. from specific to general rather than the traditional deductive approach, starting from general and building to the specifics.

Taba's grassroots model has seven steps as listed below, advocating a major role for teachers. These are –

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|-----------------------------|---|
| ● Diagnosis of needs | – Identify needs of the students for whom curriculum is to be planned. |
| ● Formulation of Objectives | – Specify the objectives by which needs will be fulfilled. |
| ● Selection of Content | – Select subject matter based on objectives and determine validity of the chosen content. |
| ● Organisation of content | – Arrange the content in a particular sequence keeping in mind the maturity of learners, academic achievement, interests etc. |

- Selection of learning experiences – Facilitate interaction of learners with content through appropriate instructional methodology.
- Organization of learning activities – The learning activities be organized in a sequence depending both on content sequence and learner characteristics.
- Evaluation – To assess the achievement of learning objectives, evaluation procedures need to be devised.

Taba's grass root model emphasizes that a broad base of involvement is necessary for curriculum decision-making. However, in spite of its having several merits its weaknesses are as follows:

- The model has employed the concept of participatory democracy to a highly technical, complex and specialized process, and this will not guarantee effective curricula.
- It takes for granted that teachers have the time and expertise to engage in such extensive curricular activities. (Hunkins and Ornstein, 1988.)

Goodlad Model

In this model the basis of formulating educational aims is the analysis of values of the existing culture. These aims are translated into educational objectives, which are stated in behavioural terms. Learning opportunities are provided based on the learning objectives, for example providing courses or readings.

According to Goodlad, educational planners deduce specific educational objectives from these learning opportunities and general objectives. From these objectives, the curriculum planners design and/or select organizing centers, which provide learning opportunities for a group of students or a student.

The model is characterized as a technical-scientific one because its various parts are inter-connected. Feedback and adjustment of the entire model result from analyzing the students performances and relating them to the values of the general society. [John L. Goodlad and Maurice N. Richter, 1966; in Ornstein and Hunkins, 1988]

Hunkin's Developmental Model

This model permits those working with the model to adjust their decision making about curricular actions. For instance, at the content selection stage if the curricularist finds that no content exists for a particular student, they can go back to the beginning and rethink the curriculum or go to the curriculum diagnosis stage to recreate the learning objectives.

This model has seven major stages:

- curriculum conceptualization and legitimization
- diagnosis
- content selection
- experience selection
- implementation
- evaluation
- maintenance

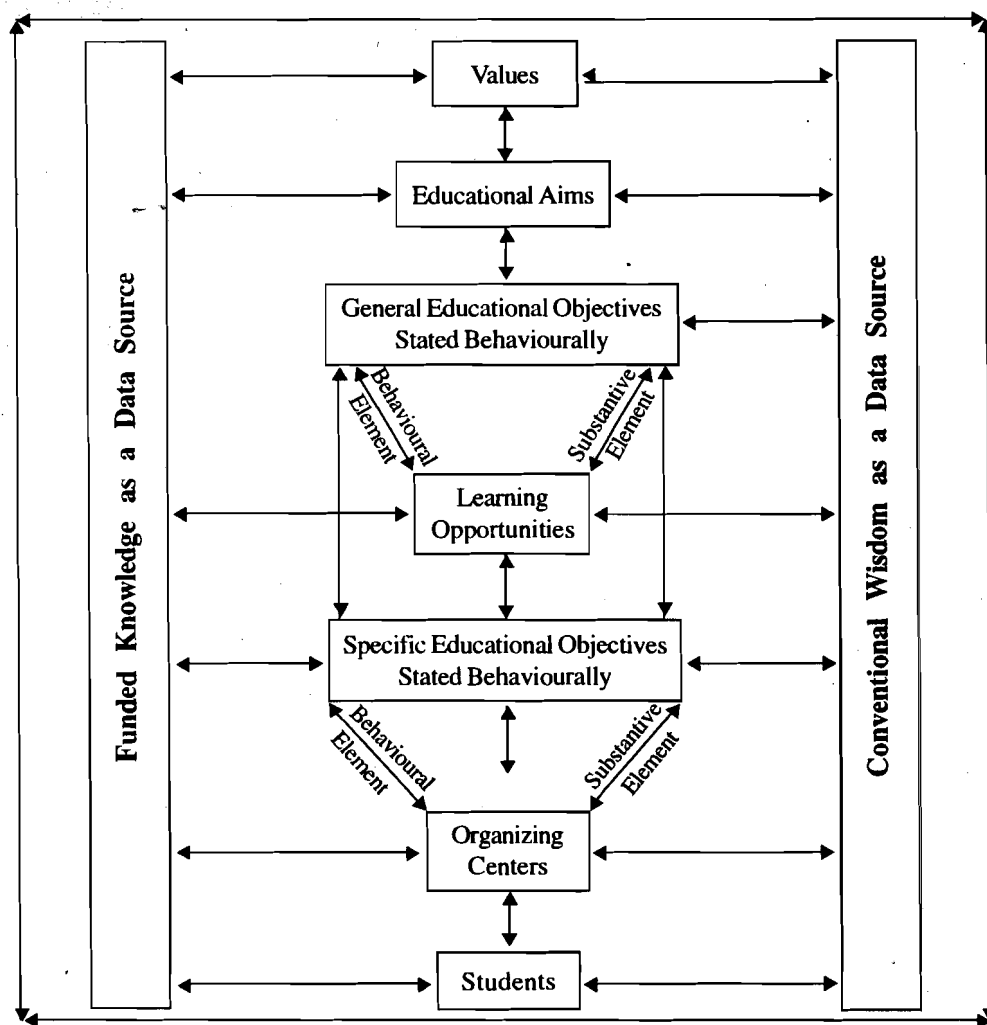


Fig. 16.2: Substantive Decisions and Derivations in a Conceptual System for Curriculum.

Source: From John L. Goodlad and Maurice N. Richter, *The Development of a Conceptual System for Dealing with Problems of Curriculum and Instruction* (Los Angeles: Institute for Development of Educational Activities, University of California, 1966), p. 65 in Allan C. Ornstein and Francis P. Hunkins, *Curriculum, Foundations, Principles and Issues*, USA, 1988.

The model is represented below diagrammatically:

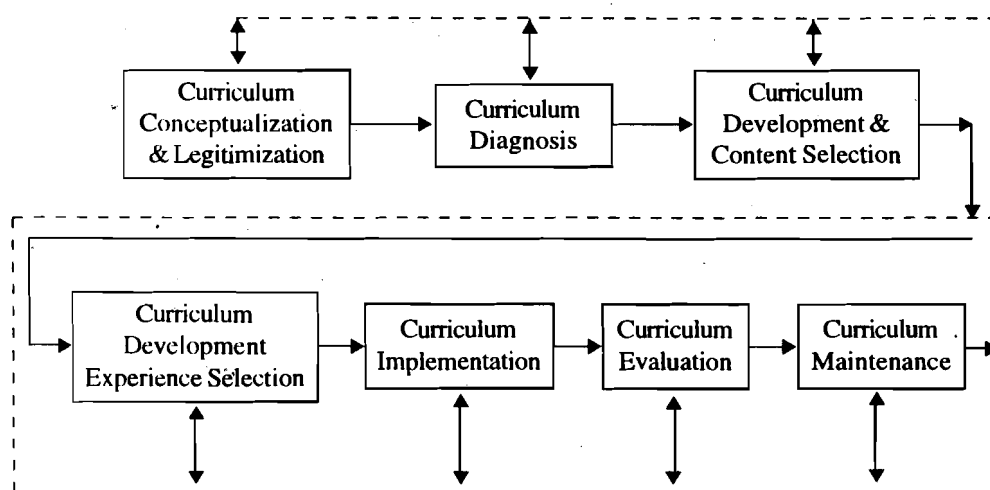


Fig. 16.3: Curriculum Development Model.

Source: From Francis P. Hunkins, *Curriculum Development Program Improvement* (Columbus, Ohio: Merrill, 1980), p. 17 in Allan C. Ornstein and Francis P. Hunkins, *Curriculum Foundations, Principles and Issues*, USA, 1988.

In this model the curriculum maintenance stage is also unique because once a curriculum is found successful the designers stop considering ahead. But curricular programmes have to be maintained for continuation of the programme.

There are several other models belonging to this camp, but each is not complete in itself. However each model does show the essential aspects for curriculum development.

Let us now examine some Non-technical – non-scientific models for curriculum development.

16.7.2 Non-technical Non-scientific Models

The nomenclature of this category of models should not mislead you into believing that such models are non systematic or non rational and neither do they suggest any degree of disorder. This approach to curriculum development focuses on the learners' self-perception of needs and preferences. Learners in this approach are involved in the curriculum planning process. The technical-scientific models on the other hand rely more heavily on the view of experts and demands of subject matter, while considering learner's needs. Hence we can say that technical-scientific models primarily focus on subject matter whereas non-technical non-scientific models, which focus on learner needs and subject matter and society, become secondary. Both the camps are looking at curricula from different frameworks.

Let us now discuss three models under this category:

- Open Classroom Model
- Wienstien and Fantini Model
- Roger's Model of Interpersonal Relations

Open Classroom Model

The Open Classroom Model is based on the Activity Curriculum. The proponents of activity curriculum do not believe in planning any activity for the children. In their view planning in advance could stifle the child's development. This movement was encouraged by William Kilpatrick at the time when learning was teacher dominated and learners were passive recipients of knowledge. According to the activity model, children learnt by doing and were free to move around in the classroom. Another popular supporter of the model is Herbert Kohl (1969). He believes that open classroom is a place where learners can, "...make choices and pursue what interests them." The teacher also finds that "the things that work best for him are the unplanned ones, the ones that arise spontaneously because of a student's suggestion or sudden perception."

Open classroom model emphasizes freedom of the child from teacher control and from a rigid curriculum. The child should choose goals as per needs, interests and aptitudes and thus choose his own curriculum. The model places great faith in the child's ability and advocates learner autonomy.

Weinstein and Fantini Model

This model is based on the belief that teachers generate new content and techniques by keeping the learner central to the whole process. They can assess the relevance of the existing curriculum, content and the instructional methods employed. Based on the assessment the curriculum is modified to meet the learner needs.

First step in the process of curriculum development is to identify the learner group. Since learners are taught in groups, their interests and characteristics form the basis of teaching. This is followed by identification of student concerns, and because of this the model is called non-scientific or non-technical. Concerns of the learner determine

organization of content. More than demands of the subject matter they organize ideas and content based on learner needs. The sources of content could be – Learners' feelings, students' identity, experiences of a growing person, and students' knowledge of the social content. The type of content will determine the skills to be developed by the students. The last stage is the identification of teaching procedures. The model aims to develop feelings of self-worth in the learners after interaction with content and teachers. It emphasizes enhancement of self-image of the learner and instills in them a confidence and belief in themselves [Ornstein and Hunkins, 1988].

Roger's Model of Interpersonal Relations

Carl Rogers (1979) has developed a model for changing human behaviour which can be used for curriculum development. In this model the emphasis is on human experiences rather than content or learning activities. He believes that by interacting in a group, learners can solve their problems. They express themselves honestly and explore each other's feelings. Rogers contends that the group experience "permits individuals... to know themselves and each other more fully than is possible in the usual social or working relationships, the climate of openness, risk taking and honesty generates trust", which permits each participant to "test out and adopt more innovative and constructive behaviours." In short, the model promotes curriculum change by changing the participants involved in curriculum development" [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.

4. How would you differentiate between technical and non-technical approach to curriculum development?

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5. Explain the philosophy of Open Classroom Model.

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Having discussed the technical and non-technical models of curriculum development let us now take up the major tasks of curriculum development.

16.8 BASIC TASKS OF CURRICULUM DEVELOPMENT

Curriculum development is a comprehensive activity that accomplishes the following:

- facilitates analysis of purpose
- designs a programme

- implements a series of related experiences
- aids in the evaluation of this process (Wiles and Bondi, 1989)

In other words curriculum development is not merely the process of introducing new courses or updating courses but is a process involving some basic tasks.

The basic tasks involved in the development of curriculum are –

- i) Establishing the Philosophy
- ii) Assessing Needs
- iii) Formulating Goals and Objectives
- iv) Selecting Curriculum Experiences
- v) Organising Content
- vi) Selecting Appropriate Instructional Strategies
- vii) Evaluating Learning and Instruction

Let us discuss each step of curriculum development in the order given above.

16.8.1 Establishing the Philosophy

All curricula should be based on a philosophy. Philosophy helps in the formulation of goals and objectives and gives a definite direction to the curriculum. The beliefs, assumptions and values related to the programme and teaching should be written down. The philosophy should be considered critically in the context of the institution, whether school or university. The philosophy could be stated in terms of belief statements, which have a rationale for action. This would help in managing and coordinating various activities. For example:

- students should learn to be critical thinkers
- the programme is one of training students for a profession
- faculty are responsible to encourage independent student learning

This process could be initiated by examining the mission statement, through group interaction like brainstorming, by considering professional programme accreditation requirements or taking views of faculty members. However, a consensus should be arrived at on the philosophy. Once the philosophy is identified and stated in simple belief statements, the ground is ready for formulating goals that will guide the process of development.

16.8.2 Assessing Needs

A basic process underlying curriculum development is needs assessment. The main purpose of needs assessment is to determine the degree to which the stated philosophy of education is being implemented and the degree to which the goals are being achieved. Objective methods and techniques should be used for data collection. However the needs assessment would involve views, perceptions of students, parents and educators and hence its nature could be subjective. The target group of students is identified. Their characteristics are reviewed. The common characteristics as well as those instrumental in determining the nature of the courses are considered. For example –

- Students are highly motivated
- Students are Hindi speaking
- Students have enrolled only to gain literary skills

16.8.3 Formulating Goals and Objectives

After developing a philosophy and knowing the needs we now have to transform needs into goal and objective. Goals are the general statements of the result of

educational endeavours and form the basis of educational planning. Objectives are more specific than goal statements and when objectives are stated in behavioural terms they become even more specific. We can say goals are general and objectives are specific. "Goals provide a philosophically unified structure that undergirds and relates all aspects of the learning situation from the development of an overall curriculum plan to lesson plans in the classroom." [Wiles and Bondi, 1989]. Specifically stated behavioural objectives evolve from goals. The basic process is –

Philosophy —————> Goals —————> Broad Objectives —————> Specific Objectives

The goals and objectives should be listed out. They should reflect the knowledge, skills and values or attitudes expected of the students once they complete the programme. For example:

- Students will be able to critically review research reports in the discipline
- Students will be able to analyze personality theories
- Students will be able to develop essays on specified themes.

A behavioural objective lets the learner know what is expected of him and it describes what the learner does at the time of learning.

16.8.4 Selecting the Content

The process of content selection should be a cooperative endeavour. It should enable students to apply the gained knowledge in their day-to-day life. The criteria for content selection should apply to the goals and specific objectives. Some curricularists place great emphasis on self-sufficiency of content, and that too in the most economical manner. According to Israel Scheffler (1970) three types of economy should be ensured – economy of teaching effort and educational resources; economy of students' efforts and economy of subject matter's extent of generalization. It helps the learners to become self-sufficient and self-reliant. The curriculum should be significant to the degree to which it contributes to basic ideas, concepts, principles etc. and to the development of particular learning abilities. There are disagreements among curriculum planners in terms of what each considers to be significant and how it contributes to learning. The selected curricular experiences should also be valid, that is authentic and accurate. Validity of content should also be examined in relation to the set goals and objectives. Another criterion for selecting learning experiences is interest, especially to the advocates of learner centred designs. The curriculum should be selected with the students' interest in mind. Although students' interests are transitory, yet teachers should identify such interests which if addressed shall help them to develop as socially useful citizens. The utility criterion for content selection pertains to the usefulness of content. The definition of usefulness is determined by the person's philosophical orientation. For example, a person favouring problem centred design would consider the curriculum useful if the learner can apply it to current political, social problems, etc.

Another obvious criterion is learnability, which is related to the appropriateness of the selected content. The content should be within the range of student experiences. The content should be easily grasped and assimilated by the learners for whom it is intended.

Feasibility criterion for content selection makes it binding upon the curriculum planners to consider the content with reference to time allowed, the available resources, the academic expertise, the financial resources, the political climate etc. Even though curriculum planners may feel they have a vast body of content to choose from yet there are many limiting factors like – number of working days in a calendar, size of the classroom etc. [Ornstein and Hunkins, 1988]

16.8.5 Organizing the Content

Once the content is identified, it needs to be organised in a particular sequence so as to realise the laid objectives. The organisation of content determines to a great extent the direction which learning will take. If a curriculum lacks systematic organization, the desired objectives cannot be attained. Logical organization of the curriculum is a difficult and complex task. It requires an in-depth understanding of the teaching learning process. According to Hunkins and Ornstein (1988) "Faced with organizing content for the curriculum, programme planners usually use two organizers – local and psychological. In following the logical organization, they organize content according to certain rules, to make it manageable. Certain concepts are central to the content, and others are pre-requisites to other concepts. In economics, for example, the concepts of supply and demand are major conceptual organizers. Without these concepts, the concepts of capital and labour or the market place cannot be grouped." Some curriculum planners consider a psychological organisation, which considers the manner in which people process information, and learn. They believe that content should be organised such that the concrete is experienced before the abstract or simpler concepts precede complex ones and so on. This is the psychological principle of content organisation.

A well-organized curriculum would ensure a definite sequence, continuity and integration of the various aspects. These concepts have been discussed earlier when dealing with dimensions of curriculum design.

16.8.6 Selection of Curriculum Experiences

Selection of appropriate curriculum experiences has always been a difficult aspect of curriculum development. The teacher must have flexibility in selecting curriculum experiences and should carry out the instructional programme. Today the definition of curriculum has broadened and distinction between the erstwhile curricular and extra curricular experiences has diminished. Curriculum planners need to provide a balanced instructional programme providing varied learning experiences. According to Wiles and Bondi (1989) these experiences can be classified as follows:

1. Personal development of the individual
2. Skills for continued learning
3. Education for social competence.

Using such a classification, curriculum planners can develop a curriculum with a variety of learning experiences. For the personal development phase the activities to be included could be physical activities according to age and maturity, activities leading to a better understanding of the self etc. The skills for continued learning would pertain to diagnosis of learning needs and the instructional programme could be structured on the basis of individual characteristics. The social competence category would include learning experiences in the subject areas like Science, Mathematics, and Humanities etc. Such a classification system would also be a guide to the classroom teachers to ensure provision of a balanced instructional programme.

A crucial factor in selection of curriculum experiences is that of relevance. The chosen experiences should reflect recent knowledge and also social and cultural trends of the times, so that it proves to be useful. The curriculum planner should be attuned to the changing times to equip the students to face the future.

Wiles and Bondi (1989) have given useful criteria for selection of curriculum experiences, in the light of overall goals and objectives of the programme. They believe that experiences should be:

- i) Valid in light of the ways in which knowledge and skills will be applied in out of school situations.
- ii) Feasible in terms of time, staff expertise, facilities in the school etc.

- iii) Optimal in terms of students learning the content.
- iv) Capable of allowing students to develop their thinking skills and rational powers.
- v) Capable of stimulating in students greater understanding of their own existence as individuals and as members of groups.
- vi) Foster in the students openness to new experiences and tolerance for diversity.
- vii) Facilitate learning and motivate students to continue learning.
- viii) Capable of allowing students to broaden their interests and address their needs.
- ix) Facilitate total development of students in cognitive, affective, psychomotor, social and spiritual domains.

Such criteria will help in selection of appropriate learning experiences for a given set of objectives. The educational environment thus generated will address social and security needs of the learners and instill in them appreciation and empathy for others. It will stimulate meaningful student activity and allow for a range of activities that facilitate learning.

In order to translate the selected curricular experiences into reality, the teacher should also decide the instructional strategies to be adopted. They should list out the method and materials to be used. For example: lecture and questioning, group work, library readings, field trips etc.

These strategies should be analyzed in terms of the degree to which they:

- i) meet the needs of the student population and
- ii) match the nature of programme goals and objectives

The strategies should be in alignment with the learning expectations, i.e. the strategies/ the opportunities for learning as expressed in the objectives.

Let us now take up the last stage in the process of Curriculum Development and that is Evaluation of the Curriculum.

16.8.7 Evaluation of the Curriculum

Evaluation aims to determine the extent to which the objectives of the curriculum have been achieved through its implementation. The tripolar relationship between objectives, learning experiences and evaluation can be expressed in the following diagram.

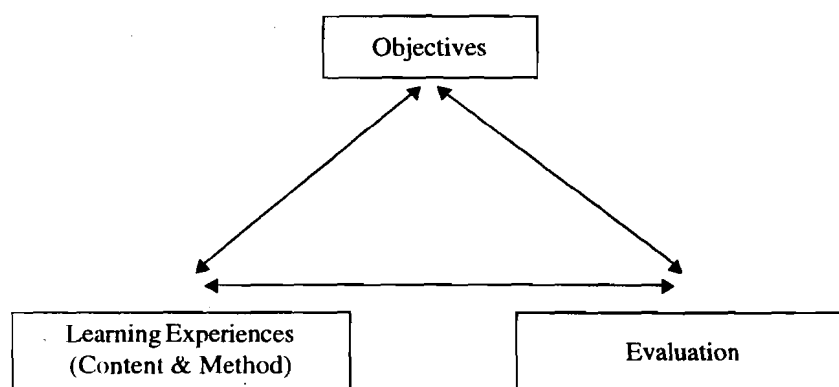


Fig. 16.4: Interdependence of Curricular Components.

Curricular components are interdependent and cannot be scrutinized in isolation. The outcome of curricular evaluation provides useful feedback for improvement of the curriculum. Evaluation can be carried out during the process of curriculum development itself. This is called formative evaluation. The results of formative evaluation give feedback on every aspect of the curricular component, which can thus be modified, accepted or rejected.

A curriculum should provide for evaluation of learning and evaluation of instruction.

Evaluation of Learning – The techniques by which student learning is to be evaluated should be listed out. E.g.

- essays
- multiple choice tests
- performance in the library
- independent projects

These techniques should be analyzed as to the degree to which they:

- meet the needs of the described student population
- match the instructional methods and materials used and
- match the programme goals and objectives, as well as goals of the institution. The general rule is that one must 'test what is taught'. Evaluation should not only reflect the content of the course and programme, but also the nature and type of expected learning, e.g. critical thought cannot be measured with short answer tests nor proficiency at cricket with multiple choice questions.

Evaluation of Instruction – Evaluating the effectiveness of instruction in the course is as important as evaluation of learning. Provision should be made in the curriculum for these techniques, e.g. –

- student ratings of instruction
- review of student work
- anecdotal comments, letters and records
- peer review of course outlines.

All aspects of the programme should be regularly and systematically reviewed for making changes and improvements in the instructional programme. [Curriculum Development, Instructional Development Centre, Queens University, 2001]

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.

6. List three criteria for content selection for curriculum development.

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7. Explain the validity criteria for selection of Curricular Experiences.

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Hence the process of curriculum evaluation follows the same cyclical course as curriculum development and can be represented by the diagram below –

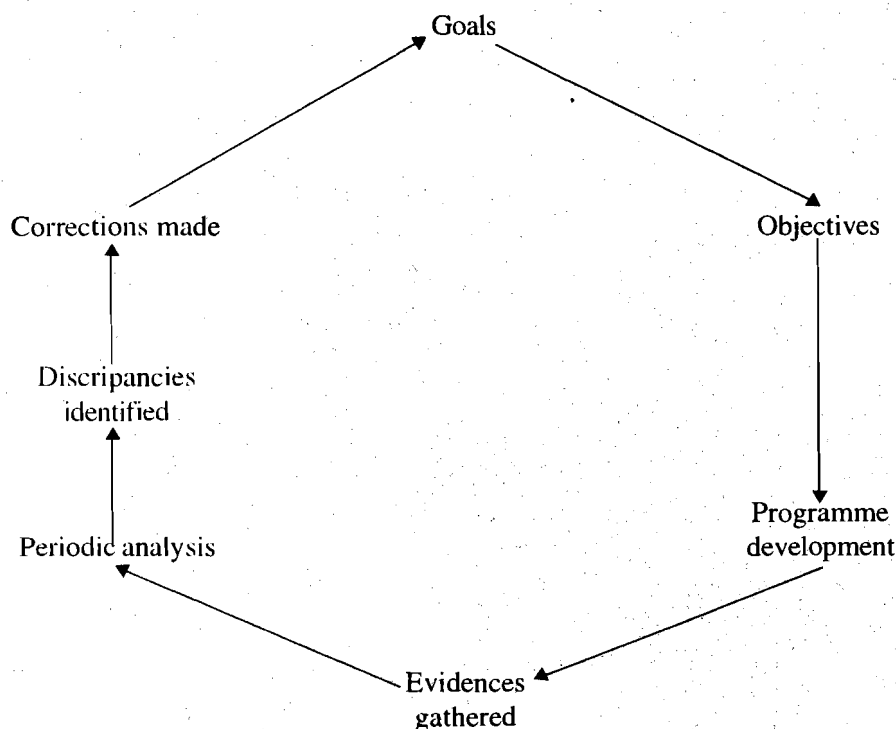


Fig. 16.5 : Cycle of Curriculum Development.

(Source: Wiles and Bondi, 1989)

16.9 LET US SUM UP

Let us summarize what you have studied in this unit.

We discussed the components of curriculum design and concluded that a philosophy forms the basis of these designs. The sources of curriculum design were discussed and also how they influence education. A curriculum design has to be considered on the basis of certain dimensions which give a definite shape to the curriculum. The unit also focussed on curriculum approaches which indicate the organization of different learning situations in a curriculum, in order to achieve the desired objectives. This was followed by a discussion on models of curriculum development, which were categorised as technical and non-technical modes. In the last section, we deliberated upon the scientific steps involved in the process of curriculum development.

16.10 UNIT-END ACTIVITIES

1. Describe the use of different approaches to curriculum development.
2. Try to work out a definition of 'Curriculum development' in your own words.

16.11 SUGGESTED READINGS

Allan C. Ornstein and Francis P. Hunkins, (1988): *Curriculum Foundations, Principles and Issues*, New Jersey: Prentice Hall, Englewood Cliffs.

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16.12 ANSWERS TO CHECK YOUR PROGRESS

1. a) A curriculum design defines the components that are to be included in a curriculum. Every curriculum design consists of goals and objectives, the content, methods and strategies for providing learning experiences and appraisal of the design. The four components are interrelated and influence each other.
- b) Curriculum should be based on an understanding of society and it should evolve in response to the changing needs of the society.
2. Four curriculum design dimensions are – Scope, Integration, Sequence and Continuity.
3. It is a method of organizing subject matter from two or more disciplines into a broader field. Its chief features are –
 - Curriculum is not limited to one particular discipline
 - Teachers have flexibility to choose content
 - Learners can interrelate concepts from different areas
4. The technical scientific approach uses an intellectual and rational approach which follows a systematic procedure for development of curricula. Such a systematically designed curriculum can be evaluated. The non-technical, non-scientific approach emphasizes the subjective and personal aspects, i.e. the learner. It is an activity-oriented approach and learners are involved in planning the curriculum.

5. The open classroom model advocates activity oriented learning in which the learner learns according to his abilities, interests and pace. His development is not stifled by a rigid curriculum nor by teacher domination.
6. The three criteria for content selection for curriculum development are –
 - a) The content should be significant to the extent to which it contributes ideas and concepts to the learner.
 - b) It should be valid in relation to the desired goals and objectives, and
 - c) The curriculum should be selected with the students' interest in mind.
7. Validity of content refers to its authenticity i.e. the selected content should be correct and accurate. The validity should be ensured in relation to goals and objectives of the curriculum i.e. the outcome is as intended.

UNIT 17 CURRICULUM EVALUATION

Structure

- 17.1 Introduction
- 17.2 Objectives
- 17.3 Curriculum Evaluation: Nature and Purpose
 - 17.3.1 Evaluation Questions
 - 17.3.2 Defining Curriculum Evaluation
- 17.4 Approaches to Curriculum Evaluation
 - 17.4.1 Scientistic and Humanistic Approaches
 - 17.4.2 Intrinsic and Pay-off Evaluation
 - 17.4.3 Formative and Summative Evaluation
- 17.5 Curriculum Evaluation Models
 - 17.5.1 Metfessel-Michael Model
 - 17.5.2 Congruence-Contingency Model
 - 17.5.3 Discrepancy Evaluation Model
 - 17.5.4 The CIPP Model
 - 17.5.5 Connoisseurship Model
- 17.6 Curriculum Evaluation Phases
- 17.7 Characteristics of Evaluation
- 17.8 Participants in Evaluation
- 17.9 Let Us Sum Up
- 17.10 Unit-end Activities
- 17.11 Suggested Readings
- 17.12 Answers to Check Your Progress

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 rôle 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

- idealization value
- decision 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.

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2. What are five questions pertinent to curriculum evaluation?

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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 Scientistic 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

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.

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ii) Formative and Summative.

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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:

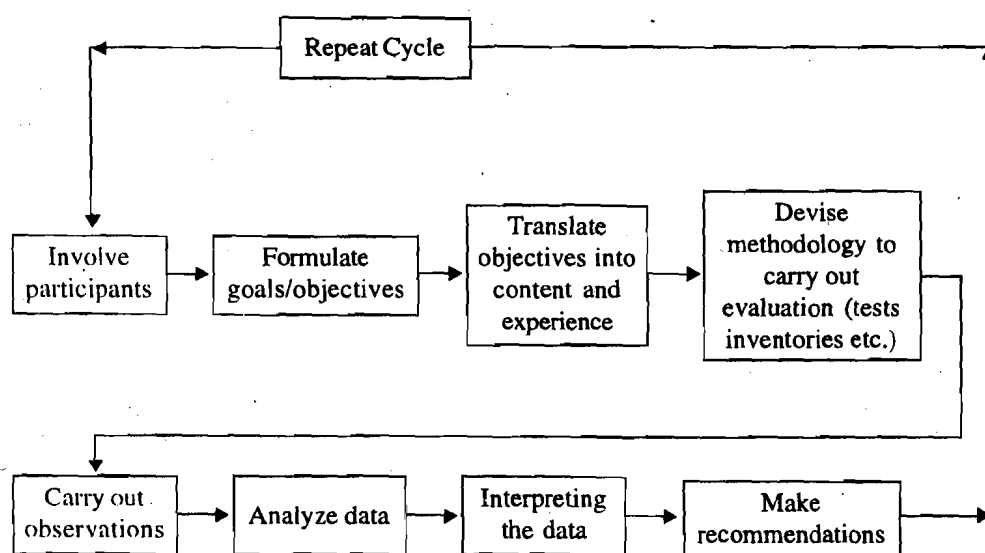


Fig. 17.1: The Tyler-Metfessel-Michael Model.

(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

evaluation procedures. 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:

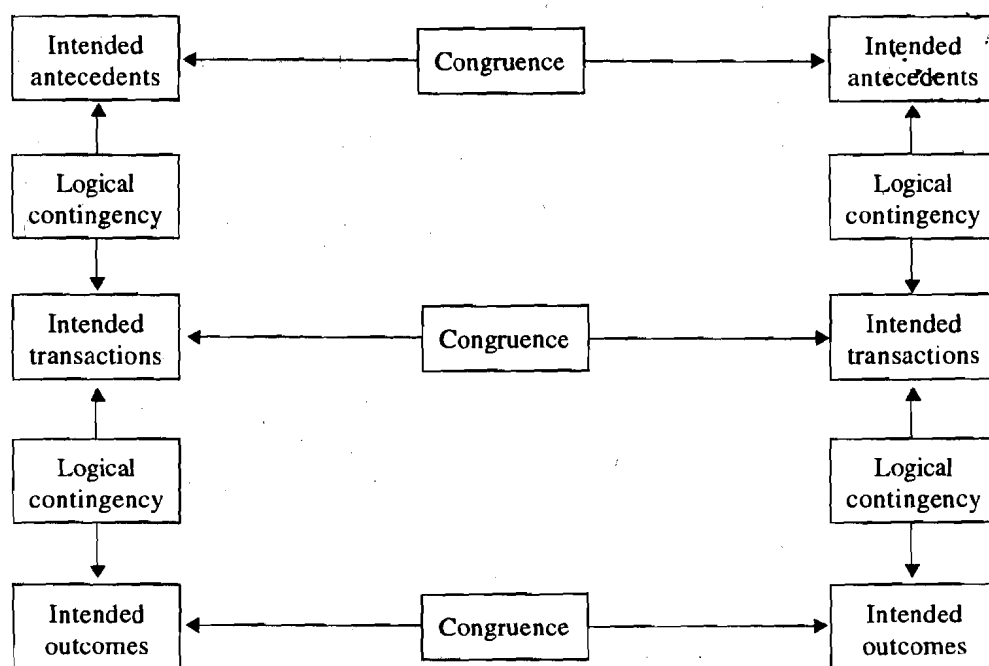


Fig. 17.2: Stake's Congruence-Contingency Model.

(Source: Ornstein and Hunkins.)

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:

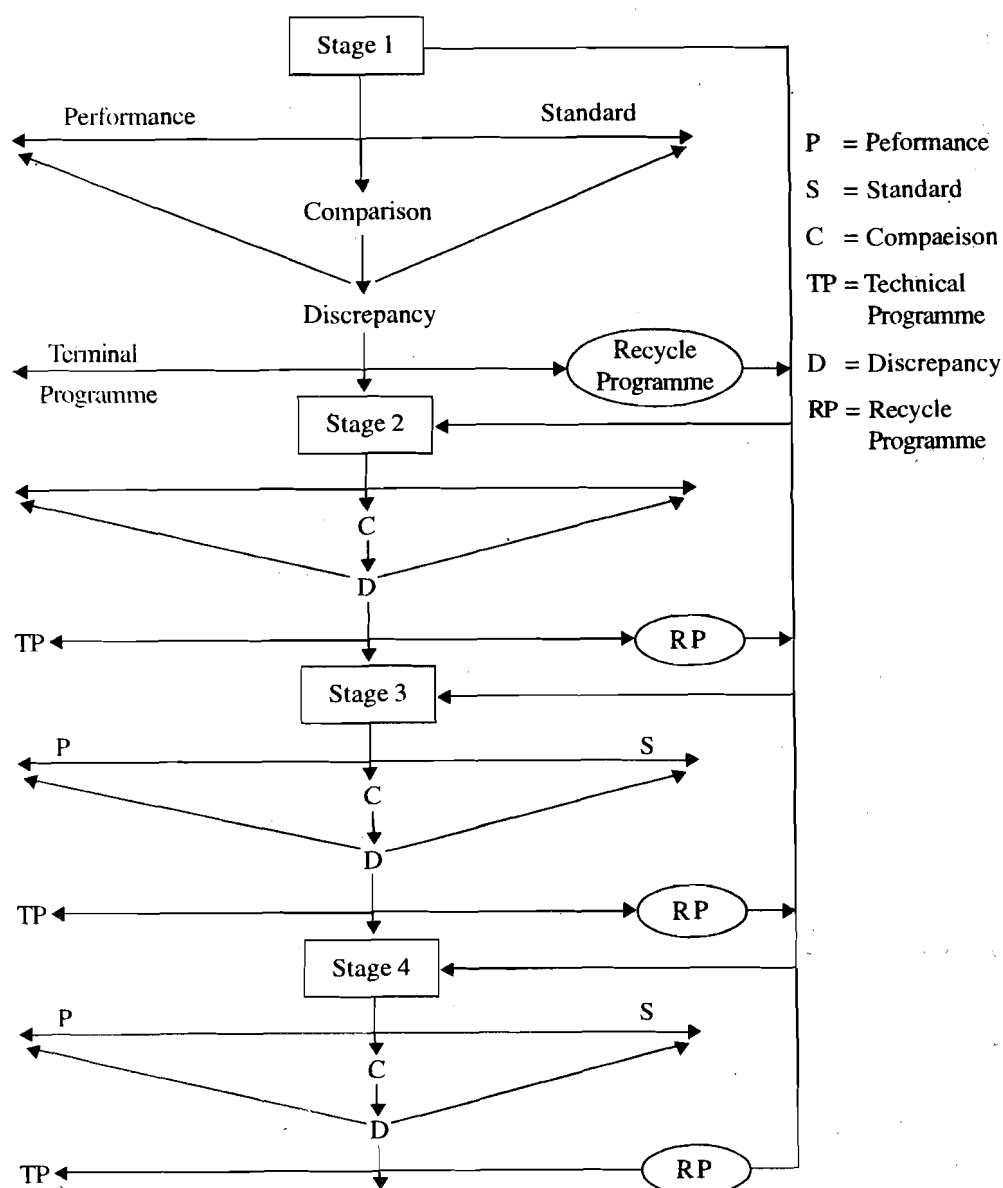


Fig. 17.3: Provus's Discrepancy Evaluation Model.

(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:

	Intended	Actual
ENDS	Planning decisions to determine objectives	Recycling decisions to judge and react to attainments.
MEANS	Structuring decisions to design procedures	Implementing decision to utilize, control and refine procedures.

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.

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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 eg., 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.

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. Along with 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

"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 incharge. 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

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

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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 focusses 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.