
UNIT 13 MEANING AND CONCEPT OF CURRICULUM

Structure

- 13.1 Introduction
- 13.2 Objectives
- 13.3 Meaning of Curriculum
 - 13.3.1 Definition
 - 13.3.2 Curriculum as a Product
 - 13.3.3 Curriculum as a Programme
 - 13.3.4 Curriculum as Intended Learning Outcomes (ILOs)
 - 13.3.5 Curriculum as Planned Learning Experiences
 - 13.3.6 Implications
- 13.4 Curriculum as a Field of Study
- 13.5 Classification of Curriculum
- 13.6 Approaches to Curriculum
 - 13.6.1 Behavioural – Rational Approach
 - 13.6.2 Systems – Managerial Approach
 - 13.6.3 Intellectual – Academic Approach
 - 13.6.4 Humanistic – Aesthetic Approach
 - 13.6.5 Reconceptualist Approach
- 13.7 Evolution of Curriculum
 - 13.7.1 Beginning of Curriculum
 - 13.7.2 Curriculum: Indian Perspective
- 13.8 Curriculum: Basic Criteria and Processes
 - 13.8.1 Curricular Criteria
 - 13.8.2 Curriculum Processes
 - 13.8.3 Curriculum Policy
 - 13.8.4 Curricular Structure
 - 13.8.5 Curriculum Framework
 - 13.8.6 Curriculum Implementation
 - 13.8.7 Curriculum Review and Revision
- 13.9 Curriculum and the Role of Teachers
- 13.10 Curriculum Change
 - 13.10.1 Implementation of Curriculum Change
- 13.11 Let Us Sum Up
- 13.12 Unit-end Activities
- 13.13 Suggested Readings
- 13.14 Answers to Check Your Progress

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

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?

.....
.....
.....
.....

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

.....
.....
.....
.....

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.

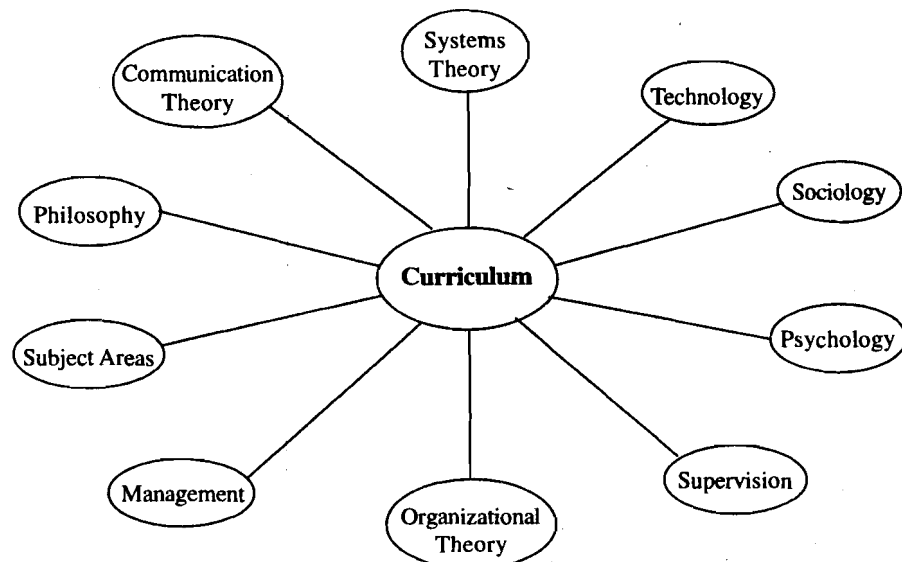


Fig. 13.2 : Sources of the Curriculum Field.

(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, field 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.

.....
.....
.....
.....

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

.....
.....
.....
.....

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.

.....

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

.....

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 if 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 or 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).

13.13 SUGGESTED READINGS

Armstrong, D.G. (1989): *Developing and Documenting the Curriculum*, Boston: Allyn & Bacon, Inc.

Bruner, J.S. (1960): *The Process of Education*, Harvard University Press.

Beane, J.A. (et. al.) (1986): *Curriculum Planning and Development*, London: Allyn and Bacon, Inc.

Carter V. Good (1973): *Dictionary of Education*, New York: McGraw-Hill.

Caswell, Hollies L. (1966): "Emergence of the Curriculum as a Field of Professional Work and Study". In Helen P. Robinson, (ed.), *Precedents and Promises in the Curriculum Field*, New York: Teachers College Press.

Dewal, O.S. (2004): 'National Curriculum', in J.S. Rajput (ed.), *Encyclopaedia of Education*, New Delhi: NCERT.

Doll, Ronald C. (1996): *Curriculum Improvements: Decision Making and Process*, 6th ed., Boston: Allyn & Bacon.

Eisner, E.W. (1970): *The Educational Imagination*. New York: Macmillan.

Johnson, M. (1967): "Definitions and Models in Curriculum Theory", *Educational Theory* (April).

NCERT (2005): *National Curriculum Framework for School Education*, New Delhi: NCERT.

Oliva, Peter F. (1988): *Developing the Curriculum*, (2nd ed.), London: Scott, Foreman and Company.

Ornstein, A.C. and Hunkins, F.P. (1988): *Curriculum, Foundations, Principles and Issues*, New Jersey: Prentice Hall.

Sharpes, D.K. (1988): *Curriculum Tradition and Practices*, London: Routledge.

Stenhouse, L. (1975): *An Introduction to Curriculum Research and Development*, London: Heinemann.

Tanner Daniel and Tanner Laurel N. (1980): *Curriculum Development: Theory into Practice*, New York: Macmillan.

Wheeler, D.K. (1976): *Curriculum Process*, London: University of London.

Wiles, Jon and Bondi, Joseph (1989): *Curriculum Development*, Ohio: Merrill Publishing Company.

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