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Lesson No.

- 1.1 : Curriculum : Concept, Characteristics, Types, Need and Importance, Foundations and Functions
- 1.2 : Curriculum Development and Approaches
- 1.3 : Curriculum Design
- 1.4 : Curriculum Change

Department website : www.pbidde.org

LESSON NO. 1.1

**CURRICULUM : CONCEPTS, CHARACTERISTICS, TYPES,
NEED AND IMPORTANCE, FOUNDATIONS AND FUNCTIONS**

Structure :

- 1.1.1 Objectives
- 1.1.2 Introduction
- 1.1.3 Concept, meaning & Definition
- 1.1.4 Characteristics of Curriculums
- 1.1.5 Types of Curriculum
- 1.1.6 Need and Importance of Curriculum
- 1.1.7 Foundations & Functions of Curriculum
- 1.1.8 Summary
- 1.1.9 Suggested Questions
- 1.1.10 Suggested Books and Web Sources

1.1.1 Objectives :

After going through this topic, the students will be able to learn about :

1. the importance of curriculum.
2. the foundation and functions of curriculum.
3. the stages and implications of curriculum development

1.1.2 Introduction :

Having a consistent value of teaching is always important for a good education system. Therefore curriculum can be found in both eastern and western education system. However different interpretations have been given towards the term 'curriculum' and the attitudes and values towards pedagogical approach may vary, which affects how students learn in schools.

1.1.3 Concept of Curriculum :

The term curriculum has been derived from a Latin word 'currere' which means 'to run'. It is a 'runway' or it refers to 'a course to run'. In the field of education, thus curriculum signifies a race course to be run by the students for achieving the aims and objectives of education. In simple words curriculum means the totality of all the learning to which students are exposed during their study in the school. Therefore it is the content, programme of planned activities, including learning outcomes, cultural preservation, experiences and social development. Curriculum is also called heart of schooling.

Difference between the term curriculum and syllabus :

The other terms that are commonly used as synonyms to curriculum are syllabus. However, much difference lies between them in respect of their meaning and scope.

Curriculum has a very wide and comprehensive concept and meanings and the term syllabus has a quite narrow and a small concept. It is only a small part or constituent of the curriculum that includes the presentation of the list of various units, sub units and topics related to the study of subject at a particular school along with a little description of the type of subject material which is to be included in them. Syllabus refers to the content or subject matter, instructional strategies and evaluation means of an individual course.

Whereas, the term curriculum stands for all types of experiences curriculum and co-curricular imparted to the students in a particular school subject or course of study. So curriculum should include all the experiences which realize the aims and objectives of teaching learning process.

Definition of Curriculum : Standard dictionaries define curriculum as a course to study offered by an academic institution.

1. According to Cummingham : It is a tool in the hands of the artist (the teacher) to mould his material (the pupil) according to his ideals (objectives) in his studio (the schools).
2. According to G. Hass : The curriculum is all of the experiences that individual learners have in a programme of education whose purpose is to achieve broad goals and related specific objectives, which are planned in terms of a framework of theory & research or part and professional practice.
3. The Education Commission (1964-66) has defined the term curriculum as :
“We conceive of the school curriculum as the totality of learning experiences that the school provides through all the manifold activities in the school or outside that are carried on under its supervision.
4. Crow & Crow (1962) : Curriculum includes all the learner’s experience in or outside school that are included in a programme which has been devised to help him develop mentally, physically, emotionally, spiritually and morally.

From the above definitions we can conclude that curriculum is defined in three ways : the courses and class activities in which children and youth engage; and total range of in class and out of class experience sponsored by the school; and the total life experiences of learner. Therefore, there is not only the content selected and delivered but also the planned and unplanned activities in which the individual participate as students.

1.1.4 Characteristics of Curriculum : A curriculum is characterised by following points :-

1. **The Curriculum is Continuously Evolving** : Present education system is not, that happen overnight. It is always product of a long and tedious process required to shape curriculum.
2. **Based on Need of Pupils** : A curriculum is always based on certain needs of pupil as well as society as a whole.

- 3. Democratically Conceived :** As curriculum is designed and developed by a group of individuals belonging to varied sectors of society, so it is always conceived democratically to cater the needs of diverse students.
- 4. Complex in Nature :** A curriculum involves the details of learning content, activities and experience with regard to every kind of students in democratic set up to provide conducive learning environment. Hence curriculum is considered to be complex in nature.
- 5. Continuity in Subject Matter :** Curriculum organization is always based on some kind of sequencing of subject matter to make it psychologically sound.
- 6. Integrated Components :** Curriculum is characterized by Integrity of its components in terms of units, various subjects, subject matters, activities, practical aspect etc. to give an experience of whole.
- 7. Administrative Flexibility :** A good curriculum must be ready to incorporate change whenever necessary. It must be always open to revision & development to meet demands of changing world.
- 8. Aim of all round development of Pupils :** A curriculum thrives all round development of pupils through considering cultivating skills, interest, attitude, appreciation, vocational values and adjustment among students.
- 9. Validity of Objectives :** Curriculum should based on only those objectives which are valid and flexible. Objectives of curriculum must durable, significant and transferable.
- 10. Application in Daily Life :** Curriculum aims at the welfare of Human Curriculum being an integral part of Education process, it involves information and skills required for easy going daily life. Curriculum encircles fulfillment of present & future needs of pupils related to routine life.

1.1.5 Types of Curriculum :

There are many types of curriculum, some of the types or patterns are being followed in educational institutions are discussed below :

Subject Centered Curriculum :

Subject matter is the most used and accepted curriculum design, it is also the oldest curriculum design. We see the earliest example in the medieval era in the Middle Ages the monastery and Cathedrals and the organizations of the seven liberal arts in the schools of ancient Greece and Rome. These subjects were broad. In the modern period this type of curriculum includes algebra, trigonometry, geography, botany, zoology, physics and chemistry. In this manner subjects added one after the other so much so that in 1930 there were over 300 different subjects. After centuries the curriculum design of the seven liberal arts are still the nucleus of the subject curriculum. In a subject base curriculum every subject is separate unit. In this kind of curriculum four or five subject are placed in curriculum and each subject has a separate teacher. Every teacher try to teach his own subject, no one intervene in the subject of other teacher.

Teacher has the control over pupil experiences, learning activities and conduct. The teacher follows the decision of others in the planning and evaluation process. The teacher and headmaster formulate the rules for the classrooms management. They demand a very stern discipline and they want a quite classroom atmosphere and teacher thinks it is the best situation for teaching learning process.

Community Centered Curriculum

The Community Centered Curriculum is meant to reach out beyond the classroom and into the community where the world can be changed by students and teachers. The curriculum is based on societal issues, and the goal of the curriculum is to explore and solve those issues. This is very much an activist

model, where students are encouraged to be leading activists in their community where life problems, community affairs, and real-world problems exist. The foundation of the community centered curriculum is built on real-world problems exist. The foundation of the community centered curriculum is built on real-world problems, and the content is various social issues. In the community centered curriculum, students are agents of change seeking to make a difference in their community. In the community centered curriculum, students are constantly interacting with one another, and team building, collaborative effort, and cooperative learning are all a large part of the school experience. Group projects dominate the curriculum, which requires frequent collaboration and fosters the social skills that are necessary for participation in a group. The principles of democracy, participation and citizenship are stressed.

Learner-centered Curriculum

The supporters of learner-centered Curriculum give importance to individual development and they want to organize the curriculum according to the needs and interest of learners, there are fundamental differences in this approach and the subject-centered design. This movement from the traditional curriculum towards a programme that stresses the interests and needs of students, this approach was used by Rousseau in the education of Emile, then Dewey in his Laboratory School in 1896-1904. It is believed that all of these twentieth-century efforts reflect the influence of Dewey. It is a fundamental principle of education that the beginning of each instruction it shall be connected with the previous experience of learners. The purpose is that the experience and the capacities that have been developed in early lessons, it should provide a starting point for further learning. The current importance given to student-centered programmes may not always acknowledge the Dewey's philosophy and influence on the movement to incorporate more student-serving learning opportunities into the curriculum.

The aim of using the learner-centered curriculum on the part of curriculum planners to interpret the needs and interests design as one based on common needs and interests of learners rather than on those of the particular population to be served. Reflected in curriculum plans, this interpretation could and sometimes did, become the rationale for teaching. Research on learner centered curriculum in recent years made it possible for curriculum planners to develop a better learner-centered curriculum. The curriculum design on the needs and interests of student has these characteristic and features.

1. The curriculum plan is based on knowledge of learner's needs and interests in general and diagnosis the specific needs and interests of the population served by the plan.
2. The curriculum plan is flexible; to accept new modification to confirm to the needs and interests of particular learner's in fact, in some curriculum designs the learner may develop his or her own curriculum plan with the guidance of a teacher.
3. The learner is consulted and tutored individually at difficult points in the curriculum and instructional process. Learner centered approach is an example of the applications of needs and interests (activities) approach. Subject obstacles were lowered or removed as teachers combined subjects to study social problems identified by students. Students in the experimental schools were more successful in college. This practice has ever lasting effect on secondary education.

1.1.6 Need and Importance of Curriculum :

The teacher is required to achieve the various aims of education. To achieve the aims of education a teacher has to employ suitable instructional methods and procedures through educational process. It is possible only when the teacher knows what efforts he supposed to make and in what sequence it

will work. In simpler words, teacher should know the content of curriculum which consists of various teaching subjects, activities, practices and experiences in the properly measurable and evaluative form. There are three main factors of educational process namely the aims of education, the curriculum, and the instructional methods. Curriculum is in fact the 'warp and woof of the whole educational process. Its need and importance may be summed up as follows :

1. Importance in achieving Educational Aims :

Merely defining the aims of education is not sufficient for educational process. There is necessity to execute well planned efforts to achieve the specified aims of education. Including knowledge, activities experiences and other practices are the factors which can help in the achievement of aims of education.

2. Criteria of Suitable Teachers :

It is curriculum which can show what types of teachers are required in the schools. We should know what type of work they are required to do and this is according to the requirements of curriculum.

3. Selection of Suitable Methods :

Curriculum enables the teacher to select suitable methods of teaching. 'How to teach' will be determined by 'what to teach'.

4. Reflects Trends in Education :

Curriculum is a means to achieve the aims of education which are dynamic and go on changing with the changing social requirements. Naturally, the curriculum will reflect the trends in education. For example, modern education places following demands on the curriculum.

5. Providing Suitable Knowledge :

Curriculum should include suitable knowledge which will help in the achievement of aims of education.

6. Providing Suitable Activities and Experiences :

Curriculum includes well selected activities and experiences needed for the development of pupils according to social requirements.

7. Providing Wholesome Influences :

Curriculum should provide wholesome school programme to develop the desirable behavior patterns in the pupils.

8. National Integration and Development :

Curriculum is important for generating national integrating and national development through inculcating different subjects and different topic related to different areas which cater the need of students with diverse background.

9. Social Development :

Curriculum helps the teacher to cater social needs of pupils. It also helps to modernize the society. If the curriculum is framed according to the time and need of the society it can truly help the society. Curriculum should not be rigid but should be flexible so that could be modified accordingly.

10. Personal Needs :

Curriculum is always known to be very effective for the fulfillment of personal needs as well as all round development of an individual. Curriculum aims at development of a student as a whole including intellectual, social and vocational aspect.

In this way curriculum plays a vital role in achieving decided instructional objectives and goals. Thus we see that curriculum is an important means to achieve the ends of education.

1.1.7 Foundation and Functions of Curriculum :

In its all forms and shape a curriculum developed for a particular class, grade level or stage of educational ladder is targeted to achieve the certain needed educational objectives for bringing desired changes in the behaviour of

the concerned students. In this way, in real sense, the foundation of curriculum development are hidden in the purpose served by the curriculum.

I. Philosophical Foundation of Curriculum :

Philosophy by nature always remains in the pursuit of seeking the truth or wisdom regarding the nature of man, the reality of things, the goal of life and host of such other things and events related to our life. Philosophy as a theory of education is general has a sufficient foundation to influence the total functioning of the process of education including curriculum planning and development. Major philosophical ideas like: Idealism, Naturalism, Pragmatism and Existentialism etc. in giving the direction and shape to the task of curriculum development at one or the other times.

I. Idealism : Plato, the famous Greek Philosopher is known as propagator of this stream. It accept the reality of mind, spirit and God and considers material world as mortal. It would also be talking about the development of the power of mind and spirit, particularly helping the student in the task of their self-realization best described as the making actual or real, the highest potentiality of the self. The composition of the subjects in a idealistic curriculum may take the following shape :

- (i) Helpful in Physical and Mental Development for the realization of Truth :** Language Literature, History, Geography, Maths, Physical education.
- (ii) Helpful in Moral Development for the realization of Goodness :** Religion, Ethics, Philosophy.
- (iii) Helpful in Aesthetic Development for the realization Beauty :** Various arts, crafts, poetry, music and Culture or aesthetic pleasing activities.

Naturalism : Naturalism as a philosophy is associated with ideas and view points propagated by the famous thinkers and philosophers like Comte, Bacon, Lamaric, Rousseau, Herbert Spancer, Huxley

Accordingly a curriculum influenced and guided by the philosophy of naturalism may be seen to given place to the subject and activities that are helpful in understanding, promotion and application of material things and phenomena. It may insist on the inclusion of the study of natural and applied science and scientific activities as the core subjects or activities. The other subjects like social, sciences, sociology, psychology, economics, arts, physical health and hygiene may be then just included for better living and adjustment in the sorrowing world as well as for catering the needs and interest of the students.

III. Pragmatism : Charles Sandes Pierce and William James are know as the founders of the philosophy of Pragmatism. In tune with its emphasis on the continous change and reconstruction of knowledge, non-existence of fixed values, purpose, ideals and necessities of life, pragmatism declares that education as such has no aim.

Pragmatism curriculum, ideally is based on the child's experiences and interest and prepare him or her for life's affairs and for the future. Water tight compartments between one subject and another must be broken down for it is the human activities that are important not school subjects and the matter they provide to be learnt. Instead of working at separate subjects, the pupil is encouraged to drawn freely upon all knowledge that is relevant to the activity in which he happens to be engaged.

IV. Existentialism : The Vanish Philosopher Soren Kier Kegard is known as the real founder of the philosophy of existentialism. Existentialistic curriculum does not believe in prescribed curriculum. It prefers to free learners to choose what to study. It would consist of experiences and subject that lend themselves to philosophical dialogue and acts of choice make. Curriculum provide more

importance to humanistic studies rather than science subjects since these help man to keep more closely to himself. It does not hesitate to include the subjects of moral and religions education, humanistic values and subjects which teach cooperative living and dignity of labour.

Psychological Foundation of Curriculum

Psychology as a science of behaviour, emphasizes to bring desirable changes in all the domains and aspect of child's behaviour cognitive, affective and psychomotor. Curriculum is developed in its comprehensive way giving place to all the needed subjects formal or informal in class and out of class activities and experiences. Child is more important than subject matter.

Curriculum meant for a particular age, grade or level should be in tune with the physical and mental health, emotional growth and social maturity of the children expected from them in general. The notion that proper reinforcement is essential for appropriate learning and occurs when the error rate in understanding and responding to the presented subject matter or performing the activities is minimize, has led to organize the learning experience in such a sequenced way as to expose the student from simple to complex and concrete to abstract in their learning ways.

Sociological Foundation

Every society, community or nation has an essential social obligation to arrange for the education of its children. Sociological consideration thus can influence or guide the task of curriculum development in two distinct ways :

- (i) To carry out changes in behaviour of the students as per needs and demands of the society.
- (ii) To make education as an agent or instrument of social changes and progress.

Curriculum related to any grade or stage of school education are essential as well as described in their own ways and thus must be given the consideration

while developing curriculum to help the students for developing a positive attitude towards the ways of living and behaving of their community and gaining useful experiences for imbibing them in their behaviour. Curriculum should provide opportunities preparing themselves for the cultural and social changes needed for their community and nation as a whole. Curriculum should help them in acquiring necessary attitude, knowledge and skills for facing the challenges in the area of improving the economy eradication of the problem related to illiteracy, superstitions, fundamentalism, linguistic intolerance, regionalism corruption and lack of ethical and moral values, vocation inefficiency, unemployment, over population, political bankruptcy, threat of terrorism and international conflicts.

1.1.8 Summary :

Thus there are definite motive or purpose need to be served in laying down the desired educational objectives. However, quite certain that philosophy as a theory of education in general has a sufficient power or bases to influence the total functioning of the process of education including curriculum planning and development. Curriculum is influenced, guided and directed by the philosophical view held by the society or nation at one or the other times.

1.1.9 Suggested Questions :

- Q.1 What is Curriculum? Discuss its meaning and concept in detail.
- Q.2 Curriculum Development is based on certain philosophical, psychological and sociological considerations. Discuss them in detail.

1.1.10 Suggested Books and Web Sources :

1. Dr. S.K. Mangal : Curriculum and School Management
2. Dr. D.S. Srivastava : Curriculum and Instruction
3. Murray Print : Curriculum Development and Design

LESSON NO. 1.2

**CURRICULUM DEVELOPMENT : CONCEPTS, STAGES,
PRINCIPLES AND APPROACHES**

Structure :

- 1.2.0 Objectives
- 1.2.1 Introduction
- 1.2.2 Meaning & Concept of Curriculum Development
- 1.2.3 Stages of Curriculum Development
- 1.2.4 Principles of Curriculum Development
- 1.2.5 Approaches to Curriculum Development
- 1.2.6 Implications
- 1.2.7 Summary
- 1.2.8 Suggested Questions
- 1.2.9 Suggested Books and Web Sources

1.2.0 Objectives :

After reading this chapter, students will be able to

1. understand the concept of curriculum development.
2. understand various stages of curriculum development.
3. explain principles of curriculum development.
4. know about various approaches to curriculum development.

1.2.1 Introduction :

Curriculum as a means or tool for achieving the purpose, and goal for carrying out the task of teaching or instruction. The success in the realization of the set objective through a formal or informal process of education depends much on the efforts made for the development of an appropriate curriculum.

1.2.2 Meaning and Concept of Curriculum Development :

Curriculum development in its word meaning stands for the development of curriculum. The term development is being used deliberately to convey that it is bigger concept than construction, collection or assimilation of the context material or learning experiences pertaining to a subject or group of subjects to be provided to the learners.

Feyereis, Fiorino and Nowak (1970 : 209) : Curriculum development is basically a plan for structuring the environment to coordinate in an orderly manner the elements of time, space, materials, equipments and personnel.

Ornstein and Humkins (1988-12) : The term Curriculum Development conveys or how curriculum evolves or is planned, implemented and evaluated, as well as what various people, processes, and procedures are involved in constructing the curriculum.

The curriculum is meant for serving the ends in attainment of desired educational objectives. For this purpose, a curriculum developer needs to lay down some specification such as the type of learning experiences provided to the learners, description of the instructional methods and materials and evaluation devices etc. A properly developed curriculum takes care of the needed men and material resources and its appropriate use for the attainment of the desired educational objectives at one or the other grades or stages of school education.

Curriculum Development is a process involving the activities like conceptualizing the curriculum, selecting and organizing the content material or learning experiences, suggesting the methods and ways of providing these experiences and evaluating the learning outcome with particular end in view in terms the attainment of the desired educational objectives.

1.2.3 Stages in Curriculum Development :

Curriculum Development is a quite systematic and organized involving a series of sequential stages for its adequate structuring and development scholars and thinkers on this issue have tried to present various models incorporating specific steps for carrying out the task of curriculum development.

I. Saylor and Alexander Model : Saylor and Alexander have presented a four stage planning model :

- (i) Goals and objectives
- (ii) Curriculum design
- (iii) Curriculum implementation
- (iv) Curriculum evaluation

II. Unruh and Unruh Model : Unruh and Unruh (1984) have presented a five step model :

- (i) Goals and objectives
- (ii) Need Assessment
- (iii) Content
- (iv) Implementation
- (v) Evaluation

III. Hilda Taba Model : Hilda Taba (1962) have presented a seven-stage model:

- (i) Diagnosis of needs
- (ii) Formulation of objectives

- (iii) Selection of content
- (iv) Organization of content
- (v) Selection of learning activities
- (vi) Organisation of learning activities
- (vii) Evaluation and Means of Evaluation

IV. Ralph Tylor Model : Tylor Ralph (1949) has presented a best known technological scientific model :

- (i) Defining the purpose
- (ii) Educational experiences related to the purpose
- (iii) Organisation of these experiences
- (iv) Evaluation of the purposes

Activities carried out through the mentioned five stages :

- 1. Formulation of Objectives :** By setting educational objectives for the learner of a particular grade, level and environment, we just try to become definite about the purpose served through the development of a curriculum. As far as possible here attempt should be made to set the objectives in such a way as to facilitate the task of bringing desirable changes in all the domains of the students behaviour – cognitive, affective and psychomotor.
- 2. Selection of Content or Learning Experiences :** In the light of what is set in terms of the goals and objectives of education for the student of a particular grade or level the planning work for the selection of the contents and topics is carried on. For a proper selection in this regard a

number of principles of curriculum construction like principle of child centredness, principle of community centredness, principle of correlation, principle of individual differences, principle of interest, utility of satisfaction of needs, principle of forward looking, principle of the availability of time and resources etc may be usefully employed by the curriculum developers.

- 3. Organisation of the Contents of Learning Experiences :** After making a proper selection of the contents and topics, efforts are made for their appropriate organization i.e. providing a sequence, order and arrangement for the selection contents, topics or learning experiences. The organizational task may be carried out by adopting two type of curriculum organization approaches : Horizontal and vertical organization. The horizontal organization is characterized with side by side arrangement of curriculum elements vertical organization is concerned with the longitudinal placement of curriculum element (the selected topics or learning experiences for including in a particular curriculum).
- 4. Providing Guidelines for the implementation of Curriculum :** What is planned and set here needs to be carried out by the teachers and learners for the realisation of the set objectives. The curriculum developers need to suggest suitable methods, techniques, strategies and teaching-learning activities for the proper teaching-learning of the selected and organised contents, topics or learning experiences.
- 5. Suggesting techniques and methods for evaluation :** What is taught or learnt by the students need to be properly evaluated in order to be estimated the degree or extent to which stipulated instructional objective have been realized what type of questions, essay type, short answer objective type etc. will be there in the question paper and how much

weightage for each of them will be given in terms of marks assigned? All such type of considerations are given proper attention in the development of a curriculum.

Actually the task and process of developing a curriculum can be compared with the task of constructing a rail road. Once the general route is planned, the rail road builder then gets into the particular of engaging in surveying and eventually laying the track. Developing a curriculum is then essentially like planning the route that a person must travel from infancy to the goals, of his growth, his culture, and his special abilities.

1.2.4 Principles of Curriculum Development :

(i) Child Centered : It should be woven around the interest, abilities, attitudes, psychological needs and develop mutual needs of the students and this should be child centered. All the activities which are organized in the school must go to activate the child.

(ii) Community Centered : It should grow out of the community life. It should be based on the needs and problems of the members of the community and should be deeply rooted into it. So far as possible while constructing the curriculum, community should be involved in the activities of the school. The present curriculum of our schools and institutions do not see eye to eye with the developments of the community. It thus becomes difficult for the students to digest the subject matter.

(iii) Activity Centered : It should provide opportunities for play activities, constructive and creative activities and project activities and in this way to emphasize learning by doing. This type of learning is easily grasped by the students.

(iv) Variety : The curriculum should have variety to allow for differences and adaptation of individual needs and interests. Actually our curriculum is rather unitary. It needs to be modified in the light of this principle.

(v) Flexibility : Flexible curriculum can be filled to the needs of the children. They should have option to adopt it to the local conditions. Fundamentally, the curriculum of the rural areas should be correlated to agriculture and allied occupations. The curriculum of urban areas should revolve around industries and professionalism. The school should also be make it flexible and adjust to it, so to tailored that it can allow flexibility for the students to adopt.

(vi) Integration : Traditional compartmentalization of the subject matter should be discouraged and the principle that knowledge is a unitary whole, be adhered to completely.

(vii) Totality of Experience : According to Secondary Education Commission the curriculum does not include only the academic subjects traditionally taught in the school but it includes the totality of experiences that a pupil receives through the manifold activities that go in the school, in the classroom, library, laboratories, workshops, play grounds and numerous informal contacts between teacher and the pupil.

(viii) Utilitarian : According to Nunn, principle of utility is the most important principle underlying the formation of a curriculum. Therefore, vocational, technical and industrial courses should be included in the curriculum and vocationalisation of education should be adopted effectively.

(ix) Preservation of Culture : Cultural heritage has been created, cultivated and perceived by generation and it differs from nation to nation, society to society and in some cases with areas too. The curriculum is to be so framed that it preserve it and hand it over to the next generation after making addition to it in good shape. It is not so with our education system or our cultural heritage i.e. honesty spirituality and sociability but our present society is known for corruption, favouritism and nepotism. Our curriculum should aim at preserving the old traditions so that the status of the nation is enhanced in the eyes of the international community.

(x) Creative Training : Raymont has correctly remarked "In a curriculum that is suited to the needs of today and of the future, there must be a definite bias towards definitely creative subjects.

(xi) Democratic Values : Our schools are to play a constructive role in the development of democratic values, so that it becomes a way of life. It has been very well said that democracy is not the form of government but model of living of the people.

1.2.5 Approaches to Curriculum Development : There are main approaches given as following of Curriculum Development.

(i) Interdisciplinary Approach :

Interdisciplinary approach has become an important and challenging approaches in the modern curriculum. Through an interdisciplinary approach, students can make connections between disciplines and see the correlations, which improves overall learning. As a result, students receive a more relevant, timely, less fragmented and enriching learning experience. With true learning, there should be no distinct boundaries between areas of study. As much as a student is learning a subject, they are also learning how to learn. The interdisciplinary approach synthesizes more than one discipline and creates teams of teachers and students that enrich the overall educational experience. Interdisciplinary courses tend to appear fragmented and incoherent to students as the term progresses because they shift from one disciplinary perspective to another. Teachers have a special obligation in interdisciplinary courses to keep the logic of the course organization in front of the students.

(a) Interdisciplinary Approach : Advantages and Disadvantages

The interdisciplinary approach is a key concept to the advancement of school curriculum at all levels. It has many advantages such as expanding student understanding and achievement between all disciplines or enhancing

communication skills and it also has disadvantages such as integration, conclusion and time-consuming curriculum preparation.

(b) Importance of Interdisciplinary Approach :

The interdisciplinary approach has been used in many ways and at all levels of education. From early childhood to graduate school, interdisciplinary studies are becoming more and more popular. Youngblood states that interdisciplinary are beneficial because "They may within the one discipline cover physical and social sciences as well as humanities as they focus on considering interrelations between realms of knowledge". Interdisciplinary techniques are not only important for a student to learn any one single discipline or solve problem in a synthesized manner but it also enriches a students lifelong learning habits, academic skills, and personal growth. The interdisciplinary approach is a team-taught enhancement of student performance, an integration of methodology and pedagogy and a much needed lifelong learning skill. Youngblood explains that the foundation of interdisciplinary techniques will lead to a future of discovery and innovation.

(ii) Enrichment Approach :

Enrichment means providing breadth to the curriculum at the same level of challenge to the student. Enrichment approach is for gifted and talented students. Gifted students can be catered to by providing enrichment opportunities and through accelerative practices. They are more interested in high-end learning. It provides enriched learning experiences and higher learning standards for gifted. It focuses on enrichment through high levels of engagement and the use of enjoyable and challenging learning experiences that are constructed around students interests, learning styles and preferred modes of expression. Environmental conditions are also important for gifted students to maximise learning. Teachers of the gifted devote less time to instruction and more time to questioning. They tend to ask many divergent questions and use

questions to stimulate discussions and to understand thought processes. All students should have access to enrichment at the appropriate intellectual level. However, appropriate enrichment for gifted students would not be suitable for all students. This is because the activities would not match the learning needs of every student. When creating programs for gifted students it is important to discover their current level of knowledge, skills and understanding. This means determining their level of achievement of learning outcomes. Some students may not have achieved a substantial number of outcomes at their stage level but may benefit from exposure to a more demanding curriculum. This means that outcomes need to be differentiated to cater for the need of a more abstract curriculum, a faster pace of learning and the ability to make connections across disciplines. Teachers of the gifted also control the classroom differently, using humour, non-verbal cues and unobtrusive ways of refocusing students attention on tasks. There seems to be more equality among gifted students and teachers than among the general school population.

Townsend (1996) defines it as "learning activities providing depth and breadth to regular teaching according to the child's abilities and needs". Enrichment activities are normally in addition to and different from the regular classroom activities.

Enrichment might be said to involve

- staying with a theme, subject or skill and developing it in depth.
- learning to new areas
- providing pupils with experiences outside the regular curriculum.

Enrichment has been defined in a number of ways. One such is that of **Thare** (1997), who described it as

- A higher quality of work than the norm for the age group
- Work covered in more depth

- A broadening of the learning experience
- Promoting a higher level of thinking
- The inclusion of additional subject areas and/or activities
- The use of supplementary materials beyond the normal range of resources.

(a) Enrichment as Important Focus in the Education of Gifted and Talented Students

Gifted children need as much motivation and recognition as other students and sometimes more. Following are some key points :

1. Enrichment activities can be of great benefit to a more able students experience of school.
2. Able students are highly motivated by challenging activities that are different from those activities they do in class.
3. Able students welcome the opportunity to discuss and debate.
4. Brainteasers and puzzles seem to be particularly enjoyed by more able students.
5. Enrichment activities are enjoyable and should form part of a programme for more able students.

(b) Kinds of Enrichment

The common ground will be that the activities should include :

- challenge
- enjoyment
- exposure to new knowledge and ideas
- thinking in different or unusual ways
- risk-taking.

Among the many kinds of opportunities to consider are :

- separate sessions
- support within class
- self-directed projects
- homework enrichment
- access to enrichment materials
- opportunities to work with talented adults or older peers
- work experience
- targeted visit

Enrichment main advantage is that it may curb problems associated with intellectual frustration and boredom.

(iii) Differentiation Approach :

Differentiation approach is also known as differentiated learning or simply differentiation. A differentiated curriculum is a program of activities that offers a variety of entry points for students who differ in abilities, knowledge and skills. In a differentiated curriculum teachers offer different approaches to what students learn (content), how students learn (process) and how students demonstrate what they have learned (product).

It is a framework or philosophy for effective teaching that involves providing different students with different avenues to learning (often in the same classroom) in terms of : acquiring content; processing, constructing, or making sense of ideas; and developing teaching materials and assessment measures so that all students within a classroom can learn effectively, regardless of differences in ability. Students vary in culture, socioeconomic status, language, gender, motivation, ability/disability, personal interests and more and teachers need to be aware of these varieties as they are planning their curriculum. By

considering varied learning needs, teachers can develop personalized instruction so that all children in the classroom can learn effectively. Differentiated classrooms have also been described as ones that are responsive to student variety in readiness levels, interests and learning profiles. It is a classroom where all students are included and can be successful. Differentiated instruction is the process of ensuring that what a student learns, how he or she learns it, and how the student demonstrates what he or she has learned is a match for that student's readiness level, interests and preferred mode of learning. Teachers can differentiate through four ways : (1) through content, (2) process, (3) product, and (4) learning environment based on the individual learner. Differentiation stems from beliefs about differences among learners, how they learn, learning preferences and individual interests. Therefore, differentiation is an organized, yet flexible way of proactively adjusting teaching and learning methods to accommodate each child's learning needs and preferences in order to achieve his or her maximum growth as a learner order to understand how our students learn and what they know, pre-assessment and ongoing assessment are essential. This provides feedback for both the teacher and the student with the ultimate goal of improving student learning. This provides feedback for both the teacher and the student with the ultimate goal of improving student learning. Differentiation is individually student centered, with a focus on utilizing appropriate instructional and assessment tools that are fair, flexible, challenging and engage students in the curriculum in meaningful ways.

(a) Pre-assessment :

The goal of pre-assessment is to determine a students knowledge, understanding and skill prior to the unit of study. The creation of a differentiated curriculum requires some pre-planning. It is important to find out what the students already know and their level of skill attainment. There are different ways that students prior knowledge can be determined, for example, brainstorming or producing a concept map or a series of questions on a test.

These types of pre-tests can provide valuable information about individual differences in ability within the class. The curriculum can then be compacted to delete outcomes that have already been achieved if some students demonstrate mastery of them. These assessments are referred to as assessments for learning that include diagnostic or pre-assessments to be used by the teacher to help guide their instruction and benefit each learner. They are informal and provide qualitative feedback to teachers and students to address strengths and needs during the unit. Pre-assessments should be conducted several weeks before the unit of study and should not be graded. Pre-assessment can be conducted in two ways : (1) by identifying learning preferences and interests (2) by identifying knowledge of student understandings (i.e. checklists, quizzes, class discussion, portfolios, entry/exit cards, anticipation guides, journals, self-reflections). Both of these types of pre-assessment are used to design student tasks, particularly when a student might require support, enrichment, or have different learning styles, intelligences, or interests. Teachers can also determine, locate and compile appropriate resources and decide timelines/priorities for upcoming units.

The goals of differentiated instruction are to develop engaging tasks that challenge and enhance learning for each student. Pre-assessments can gather information about each student's strengths, comforts, or areas of weakness. This leads to appropriate differentiation that accommodates each students learning needs and preferences. Assessments should be used as a tool to create clear and meaningful instruction that guide each student towards challenging but not frustrating activities.

(b) Ongoing Assessment :

Ongoing assessments allow the teacher to know their students and their needs in order to select effective teaching and learning strategies and interventions to maximize student achievement. Teachers use ongoing assessments to gather information about a students knowledge and capabilities, to direct future planning, to monitor student progress and to evaluate student

achievement. It is the process of gathering information from a variety of sources such as assignments, teacher observations, class discussions and tests and quizzes. Teachers must assess regularly in order to inform their instructional strategies, learn about each student's readiness, interests, and learning preferences and to improve student learning. This information can be gathered through diagnostic (pre-assessments), formative and summative assessments, as well as individual Education Plans, Ontario Student Records, student interest surveys, and multiple intelligence or learning style inventories. Assessment for learning not only includes diagnostic or pre-assessment measures, but also formative assessment. Formative assessments are used during a unit to provide understanding about what the student is learning, and continually guide instructional decisions. Assessment as learning takes place when students self-assess their work and reflect on their growth as learners.

(c) Content :

The content of lessons may be differentiated based on what students already know. The most basic content of a lesson should cover the standards of learning set by the district or state. Some students in a class may be completely unfamiliar with the concepts in a lesson, some students may have partial mastery of the content or display mistake ideas about the content and some students may show mastery of the content before the lesson begins.

(d) Process :

The process of how the material in a lesson is learned may be differentiated for students based on their learning styles, taking into account what standards of performance are required for the age level. This stage of differentiation allows students to learn based either on what method is easiest for them to gain knowledge, or what may challenge them most; some students may prefer to listen (or require practice in listening), or acquire knowledge by manipulating objects associated with the content. Information may be presented

in multiple ways by the teacher, and may be based on any available methods or materials. The product is essentially what the student produces at the end of the lesson to demonstrate the mastery of the content, tests, evaluations, projects, reports or other activities. Based on students skill levels and educational standards, teachers may assign students to complete activities that demonstrate mastery of an educational concept (writing a report), or in a method the student prefers (composing an original song about the content, or building a 3-dimensional object that explains mastery of concepts in the lesson or unit). The product is an integral component of the differentiated model, as the preparation of the assessments will primarily determine both the 'what' and 'how' instruction will be delivered.

(e) Learning Environment :

The learning environment includes the physical layout of the classroom, the way that the teacher uses the space, environmental elements and sensitivities including lighting, as well as the overall atmosphere of the classroom. The teachers goal is to create a environment that is positive, structured and supportive for each student. The physical environment should be a place that is flexible with varied types of furniture and arrangements, and areas for quiet individual work as well as areas for group work and collaboration. This supports a variety of ways to engage in flexible and dynamic learning. Teachers should be sensitive and alert to ways in which the classroom environment supports students ability to interact with others individually, in small groups, and as a whole class. They should employ classroom management techniques that support a safe and supportive learning environment.

As the interdisciplinary approach continues to synthesize the characteristics and methods of multiple disciplines while developing lifelong learning skills. Interdisciplinary curricula is time consuming and takes collaborative team work to create, which can seem like a hard and exhausting disadvantages, but in the end, the interdisciplinary approached inhibits many

avored skills that are sought by future colleges and employers. Students and their teachers will advance in critical thinking, communication, creativity, pedagogy and essential academia with the use interdisciplinary techniques. In a classroom where the teaching theory is based on differentiated instruction, students should feel welcomed and safe. The teacher teaches for success and fairness is evident. The teacher and students collaborate for mutual growth and success. In a differentiated classroom, there is a strong rationale for differentiating instruction based on assessment results, student readiness, interest and learning profiles. All instructions are clearly stated in a way that students easily understand. Students are aware of the classroom rules and know routines and procedures. There is a procedures for all activities completed in the classroom. These procedures should promote minimal noise, minimize unnecessary movement, encourage on task behaviour, have a plan for those who finish early, and promote independent work and responsibility. Gifted students can be catered to by providing enrichment opportunities and through accelerative practices. They are more interested in high-end learning. It provides enriched learning experiences and higher learning standards for gifted students.

1.2.6 Implications for Curriculum Development :

The task of curriculum development not end with the construction of curriculum in respect to the decision taken for the inclusion of the subject or group of subjects, topics and content material included and the ways and wears suggested for their teaching and learning, it still travel further for performing a essential task concerning the implication of constructed curriculum.

Implications of Curriculum Development :

1. Major change for local authorities
 - (i) New structures and process
 - (ii) Training
 - (iii) Demanding Timetable

- (iv) Strong potential for improving service delivery and relationships with other agencies
- 2. Balancing provision and feasibility
- 3. Employer Engagement
- 4. Apprenticeships - public sector must play its part.
- 5. New Scope for teachers and institutions
 - (i) Innovative teaching
 - (ii) School ethos (What is our vision)
- 6. Better inter-subject connection means need for strong communication across department.
 - (i) The coherent learning environment.
- 7. New courses, new ways of thinking, assessing and supporting
 - (i) Diploma - entirely new course structure personalised learning
- 8. Choice means flexibility which in turn demands
 - (i) Coherent strategy
 - (ii) Planning
 - (iii) Resources
 - (iv) Training (Professional Development)
 - (v) Measurement strategies, processes and tools
 - (vi) Performance management and assessment.

1.2.7 Summary :

The effectiveness of the total curriculum or the total course lies with in the curriculum when applied to curriculum evaluating focus on discovering whether the curriculum as designed, developed and implemented is producing or can produce the desired results. There are number of guiding principles for

better curriculum development. Experts can choose effective approach while designing the curriculum.

1.2.8 Suggested Questions :

- Q.1 Discuss the concept of curriculum development in detail.
- Q.2 What are the various steps involved in the development of curriculum. Discuss these steps in detail.
- Q.3 Write a detailed note on Curriculum development approaches.

1.2.9 Suggested Books and Web Source :

1. Dr. S.K. Mangal : Curriculum and School Management
2. Dr. A.G. Kalaiyaran : Curriculum Development

Web Source :

www.google.com

LESSON NO. 1.3

**CURRICULUM DESIGN : CONCEPT, TYPES, PROCESS AND STRATEGIES
Structure :**

- 1.3.1 Objectives
- 1.3.2 Introduction
- 1.3.3 Concept of Curriculum Design
- 1.3.4 Types of Curriculum Design
- 1.3.5 Process
- 1.3.6 Strategies
- 1.3.7 Summary
- 1.3.8 Suggested Questions
- 1.3.9 Suggested Books

1.3.1 Objectives :

After reading this lesson, students will be able to :

1. Understand the concept of curriculum design.
2. Know about the various types of curriculum design.
3. Learn about the process involved in curriculum designing.
4. Learn about strategies related to curriculum design.

1.3.2 Introduction :

The curriculum in its simple meaning includes an organised pattern of educational programme and tries to answer about how and when of it. Curriculum is one of the main concerns in the educational field. It is an important element of education. It is the crux of the whole educational process. Curriculum is the total structure of ideas and activities. If a teacher is guide, the curriculum is the path. Curriculum seems to be considered greatly as what teachers are going to teach and in other words, what learners are going to learn. In fact, curriculum is also closely related to the output of educational process that how well the learners are learning. Curriculum development, curriculum

organisation is followed by curriculum designing. This chapter include curriculum designing, types and various strategies involved in curriculum designing.

1.3.3 Concept of Curriculum Designing :

Curriculum design involves the deliberate efforts to describe the planned and systematic organization of curriculum within a course. Curriculum designs are considered as instructional blocks. In simpler words, it is the organised way adopted by teachers to plan the classroom instructions. When a teacher designs a curriculum, he or she directly identifies what will be executed, who will do it, and what schedule will be followed. Curriculum designing is a purposeful activity aiming at improvement in student learning and organising an effective environment along with several other reasons to employ curriculum design as well.

In words of Jhonson “Curriculum design is a statement which identifies the elements of the curriculum, states what their relationships are to each other, and indicates the principles of organization and the requirements of that organization for the administrative conditions under which it is to operate. A design of course needs to be supported with and to make explicit curriculum theory which establishes the sources to consider and principles to apply”

Curriculum design is a very important part of creating a contextually relevant and responsive teaching learning environment for both teacher and student. The curriculum contains the knowledge, skills and competencies that students need to master in order to move towards the next level in their studies. Therefore, curriculum should be up to date, interesting relevant and stimulating in nature. Curriculum designing is a systematic process bound by many educational principles. Curriculum designs may be subject centred, problem centred or child centred. An effective planning and laborious efforts are required for effective design and execution of curriculum at every educational level.

1.3.4 Types of Curriculum Design

Various types of curriculum design that are commonly used by teachers worldwide are discussed below:

1. Subject Centred Curriculum Design

Subject centred curriculum design focus on a particular subject matter or subject or discipline. This curriculum design explains what is to be taught and how it should be taught. Core curriculum is best example of a subject centred design which is widely used across Indian schools and colleges. In this type of standardized core curriculum, a pre determined list of subject is provided that they need to teach their students along suitable teaching ways. For instance, subject centred curriculum focusing on biology. This type of curriculum design mainly focuses on the subject matter rather than the student or teaching method.

The major limitation of subject centred curriculum design is that it ignores the need and abilities of an individual as stress is only on subject matter. This form of curriculum design is constructed without taking into account the specific learning styles of the students, student engagement and motivation.

2. Learner Centred Curriculum Design

In contrast to subject centred curriculum design the learner centred curriculum design considers each individual's need, interest, and potentialities with due weightage. In simpler words, this form of curriculum design acknowledges that students are not alike and have same adjustability. Learner centred curriculum design aims to empower learners and allow them to shape their education according to their psychology and capacity.

Learner centred curriculum is as flexible as it classify the students giving them an opportunity to choose assignments, learning experiences or activities according to their need and abilities. This motivates the students and helps them stay engaged in the subject matter that they are learning in educational setup.

It is a labour intensive type of curriculum design. Developing differentiated instruction poses pressure on the teacher to create instruction and find appropriate materials that are use to each student's learning needs. Teachers feel burdened and may not have the time or may lack the experience or skills to create such a plan. Learner centred curriculum design also demands

teacher's planning balance with diverse student needs along with intended outcomes, which is not as easy to obtain as sounds.

3. Problem Centred Curriculum Design

Problem centred curriculum design is actually an aspect of student centred design. This curriculum basically focuses on training the students how to look at a problem and how to come up with an effective and useful solution to that particular problem. Students are thus exposed to real life situations through which teacher helps them develop skills that are useful to the real world in future.

Problem centred curriculum design involves an increase in the relevance of the curriculum with real life. It allows students to be creative and innovate during they are learning. The major drawback to this kind of curriculum design is not taking learning considerations into account and burdensome for teachers.

4. Topical curriculum design:

In this type of curriculum design, selected topics of study suitable for the age ability and interest of children are included in the curriculum and each topic is taught completely in the class where it is first introduction of each topics are linked together by the teacher with the help of link lessons for the children of the age group 13 above this approach is quite possible.

5. Concentric curriculum design:

In this type of design whole curriculum is spread over a number of years. A general introduction of almost all the topics are attempted at the beginning and it is developed in successive year according to the mental development of the pupil. In the beginning topics are presented to the pupil in the simplified way and in the next years more and more details of its parts are gradually added. It follows the maxims of teaching such as form whole to part simple to complex easy to difficult etc. Bruner is the main exponent of this approach as he thinks that discovery learning is only possible only of this approach is maintained sometimes this approach is referred to as concentric approach.

6. Integrated curriculum design:

An integrated curriculum design is described as a design that connects different areas of study by cutting across subject-matter lines and emphasizing unifying concepts. Integration focuses on making connections for students, allowing them to engage in relevant, meaningful activities that can be connected to real life. Can you imagine how an integrated curriculum can benefit your students? Understanding the benefits and how to effectively integrate curriculum can help teachers and students become more successful in the classroom.

As there are several approaches to the curriculum designing. These vary in their major focus. Concentric curriculum is concerned with the mental development of pupil. After topic has been selected according to the relevant fundamental principles described above, they have to be systematically arranged so as to facilitate meaningful and effective transaction. Every content which has to be taught must be arranged in a systematic manner.

1.3.5 Process of Curriculum Design

Curriculum design has stages. Curriculum design is a systematic way of going through planning the instructional process. Curriculum design consists of some flexible set of steps to be followed in prescribed order. Stages of curriculum designing are interrelated and inter dependent. So the curriculum design process tends to be iterative, various stages being returned to for reconsideration and possible modification. Various stages entailed in the whole of curriculum design process are as following:

Step 1 Deciding curriculum design objectives or specifications:

Teachers are primarily *designers of curriculum*. The main aspect of teaching is the crafting of curriculum and learning experiences that end up with specified purpose. The effectiveness of a curriculum design revolves around the specified goals and objectives in terms of accomplishment of explicit goals for their students. This step mainly focus on learning outcomes comprising disciplinary specific, generic, employment related and life-long learning outcomes.

Step 2 Conceptualizing a curriculum design

The second step in curriculum design process involves Designing authentic as well as blended learning activities. No doubt teaching and learning experiences are needed to be aligned with learning outcomes effectively. A design should be selected intentionally following a student-centred blended curriculum design, with a view to affording students rich opportunities to integrate theory with practice and apply knowledge and skills in authentic, diverse and technology enabled settings. In this step various teaching and learning activities are required to be arranged in such a manner so that these can foster progressive and coherent achievement of expected learning outcomes throughout the implementation of curriculum.

Map alignment between learning outcomes and assessment should be followed at this vary stage. Mapping the relationship between learning outcomes and evaluation, across various components of the curriculum is crucial. This helps a designer to determine breadth and depth of coverage of course learning outcomes, as well as the diversity of the assessment schedules. Curriculum mapping is necessary to properly evaluate the sequence and coherence of matter added in curriculum design. It represents a visual diagram of a curriculum which leads easy analysis, judging and evaluation. Analyzing a visual representation of the curriculum is a useful and easy way to identify potential gaps, redundancies and alignment issues in the sequencing of curriculum. Curriculum maps can be created on paper and with software programs using online services.

Step 3. Developing a curriculum design

Once progress has been made toward setting curriculum goals, identifying design constraints, and selecting a design concept, the next important task is about developing a full-fledged design. Curriculum design calls for making decisions on what the content and structure of a curriculum will be. Because the task is a complicated concept and it is the responsibility of

curriculum design team to consider various strategies that can be useful to facilitate the process. In whole design work, several concepts grow out in making decision making such as analysis of benefits and costs, risk involvement, and trade-offs. Here they are examined intensively from the perspective of curriculum design.

Step 4. Refining a curriculum design

A curriculum sometimes works as its design leads us to expect but sometimes it may need for tuning is inevitable. Some of the needs for tuning will be identified during the final stages of design. Apart from this, many of the mistakes will come up only when the design is implemented. Some designs are likely to have unexpected side effects when implemented. Even if the curriculum works well enough for a while, eventually some things are likely to go wrong unexpectedly and need to be fixed for future convenience.

With course of time new knowledge, new methods, new technologies and new circumstances demand new opportunities and possibilities. So a design should include provisions for monitoring the implementation of the curriculum and its effects. Aspects of a curriculum design for which systematic monitoring is desirable emerge from the premise that:

1. The actual curriculum matches the design
2. The students subjected to the curriculum are actually acquiring the learning the curriculum has been designed to effect
3. The learning, once acquired by students, is having the benefits attributed to it.

It is also necessary, of course, to monitor whether the various costs are within tolerable bounds but that is an aspect of change that schools are already able and eager to perform.

1.3.6 Strategies for Curriculum Designing

The following curriculum design strategies can help a designer to manage each stage of the curriculum design process.

1. **Identifying the needs of students:**

Students are the centre focus of an educational process. So there is need to put great emphasis on requirement and needs of students. This can be done only through need analysis, which involves the collection and analysis of data related to the needs learner. This data includes the information about learner perceptions, strengths, and weaknesses, previous learning and experiences and backgrounds.

2. **Learning goals and outcomes:**

Education is a purposeful activity. Knowing about the goals and outcomes will help the teacher to focus on the intended purpose of the curriculum and allow you to plan effective instruction that will surely achieve the desired outcomes. Intended outcomes are the measurable forms of knowledge, skills and attitudes that students are expected to achieved during the course.

3. **Identifying limits:**

Identifying the limits of your curriculum will impact your curriculum design. As time is a common constraint that need to be considered on priority basis. How many hours, days, weeks or months will be included in the particular term. If there is not enough time to execute all of the instruction that has been planned then it will surely impact learning outcomes.

4. **Curriculum mapping**

Curriculum mapping is necessary to properly evaluate the sequence and coherence of matter added in curriculum design. It presents a visual diagram of a curriculum which leads easy analysis, judging and evaluation. Analyzing a visual representation of the curriculum is a useful

and easy way to identify potential gaps, redundancies and alignment issues in the sequencing of curriculum. Curriculum maps can be created on paper and with software programs using online services.

5. **Considering instructional methods**

Emphasising instructional methods will give teacher a throughout view of course and consider how they will work with student learning styles. If the teaching methods are not synchronous to the curriculum, the instructional design or the curriculum design will need to be altered accordingly.

6. **Effective evaluation**

Every curriculum design is incomplete without an effective evaluation technique. Evaluation serves the purpose to determining the curriculum design is working or if it is failing. Aspects to be evaluated include the strengths and weaknesses of the curriculum and achievement rates related to learning outcomes. Evaluation should be formative and summative.

7. **Continuous improvement:**

Improvement is a necessity in educational process. The design of the curriculum must be assessed and improved periodically and refined based on assessment data along with modernizing world. As the need of individuals keep changing according to the changing environment.

1.3.7 Summary:

It can be concluded that the curriculum designing process encompasses the design of integrated plans for learning, the design of implementation of the plans and of the evaluation of the plans, their implementation and the outcomes of the learning experience and improvement if required. In this way curriculum design is a process of critical questioning to framing learning and teaching. The main purpose of this process of designing is to translate broad statements of intent into specific plans and actions that are feasible. The intention behind this gradual process is to ensure, as far as possible, alignment between goals and

outcomes. The curriculum design process at course level sets the context for topic design and topic design sets the context for each learning experience. Topics need to be designed to come together in structured combinations to form coherent major and minor sequences and courses. Parts of the process especially at the course and topic levels overlap and ideally should occur interactively with course design informing and influencing topic design and topic design informing and influencing course design. Curriculum designing ultimately leads to an effective educational set up along with efficacious teaching learning process.

1.3.8 Suggested Questions:

1. Define curriculum design. Explain various types of curriculum designs.
2. Discuss steps involved in process of curriculum designing.
3. Discuss strategies required in curriculum designing.

1.3.9 Suggested Readings

- | | | |
|---------------|---|---|
| Nandra, I. S. | : | Knowledge and Curriculum |
| Kelly, A. V. | : | Curriculum Theory and Practice |
| Taba, H. | : | Curriculum Development: Theory and Practice |

LESSON NO. 1.4

**CURRICULUM CHANGE: CONCEPT, OBJECTIVES, FACTORS, BARRIERS
AND ROLE OF DIFFERENT AGENCIES**

Structure

- 1.4.1 Objectives
- 1.4.2 Introduction
- 1.4.3 Concept of Curriculum Change
- 1.4.4 Aims and Objectives of Curriculum Change
- 1.4.5 Types of Curriculum Change
- 1.4.6 Factors Effecting Curriculum Change
- 1.4.7 Role of Different Agencies in Curriculum Change
- 1.4.8 Barriers to Curriculum Change
- 1.4.9 Conclusion
- 1.4.10 Suggested Questions

1.4.1 Objectives

After reading this lesson students will be able to:

1. Know about the concept of curriculum change.
2. Understand the aims and objectives associated with curriculum change.
3. Explain various factors and agencies influencing curriculum change.
4. Enlist various barriers to curriculum change.

1.4.2 Introduction

Change is the law of nature. Change takes place continuously with the explosion of knowledge and technological advancement. Change is generally unconscious, unplanned and ever going process which basically involves the remodelling and re-revolutionizing the familiar facets into new and advanced relationships. Change may seem uncomfortable in most of the settings but it is an important and inevitable part of human life. In order to avoid stagnation in education system change is quite important no matter whether it is changing the way of instruction, way of developing skills or simple alteration in teaching content. Education is a dynamic process which leads to a great range of changes in student's behaviour. At the same time education and its constituent elements also in the state of being change. As curriculum is an important element of educational process. Hence curriculum is always subjected to change process unconsciously or consciously in teaching learning context. This chapter will put light on concept of change in curriculum, various factors and agencies associated with curriculum change at various levels.

1.4.3 Concept of Curriculum Change:

A curriculum is designed to provide knowledge, skills and meaningful experiences to learners which are essentially required to lead a successful life. In other words curriculum is comprised of various subjects, subject matter, learning activities and experiences required for acquiring necessary skills related to life and work including personal development which is all round and well being.

At present time, there is growing need of reconsidering and redesigning of curriculum to cope up with modernizing and expanding horizon of learning as well as teaching. Moreover, curriculum is a multidimensional concept revolving around inputs and outputs in education in relation to social, personal and political needs and aspiration as well.

Curriculum change is processes which requires time, energy, resources and finally lead to improvements in educational process. Change in itself is a kind of learning. In reconceptualising a curriculum many reforms are based on how curriculum has been organised. A curriculum that is inappropriate, confusing or burdensome needs the shift from product model to process model. A range of sophisticated strategies are required to alter how the teacher will teach and how the students will learn. Curriculum change is of greater importance for educational improvement. Some points putting light on need of curriculum are as following:

1. Curriculum change acts as stimulator for change in one-self.
2. Curriculum change is necessary for decision making by stalk holders at next level.
3. Curriculum change is helpful in development of new functional educational philosophy.
4. Curriculum change leads to improvement in teaching learning environment.
5. Curriculum change is necessary to keeping students and teachers up to date with new knowledge and information.
6. It leads to an improved way of instructions.

1.4.4 Aims and Objectives of Curriculum Change

Objectives are defined as statements that are specified as the end-points and desired outcomes of the curriculum. Objectives may be associated with a unit, a lesson plan or a learning activity. They specify and describe curriculum outcomes in more specific terms than goals or aims. Objectives are also the directions about what educators want the students to be able to do. Some of the aims and objectives of curriculum change are given below:

1. Curriculum change aims at the practice of educational policies and systems designed by various agencies and government at state or central level
2. Objective of Curriculum change is the maintenance of standards regarding instructional process as described by various programmes and maintenance of professional/industry accreditation standards, where required.
3. Curriculum change intended to design curriculum that supports the development of deep learning and meaningful application of knowledge and skills in a range of relevant contexts from ever changing daily life.
4. Curriculum change is must to reflect good practice in relation to both pedagogy and compliance.
5. Curriculum change aims at fulfilling the needs of students according to their interest and ever changing social expectations and provide them such education what they need to achieve to succeed in life.
6. To fulfil high expectation of staff and students who strive for excellence
7. To provide a safe and purposeful environment Learning and teaching
8. Encouraging the students to have enquiring minds and seek opportunities to become global citizens and support students' paths to success.
9. Curriculum change aims at providing creative and flexible approaches to learning and teaching based on modern setup.
10. To offering an enough innovative curriculum developed with the aspirations and interests of the student at the centre following student centred approach.
11. Including new innovations and new technologies to motivate and inspire students and equip them with current skills.

1.4.5 Types of Curriculum Change

According to Jhon Mcneil, the different forms or ways of change that can be used to alter the curriculum are as following:

1. **Alternation :**

Alternation is the process of causing to alternate or alternating the occurrences. Curriculum alternation involves introduction of certain material, content items or methods of teaching to existing curriculum. Alternation is some sort of adaptation in the programmes that leads to improvement in overall process through alternation.

2. **Restructuring :**

Restructuring involves the bringing about a drastic internal change that leads to amendments in the relationship between different components or elements of an organised system. These changes results through modifications in systems. For example using concepts like team teaching, project methods in spite of traditional teaching will come under restructuring.

3. **Substitution :**

In this type of curriculum change one elements or component is substituted by the other. That involves substitution of one whole paper or one unit replaced with one another. This kind of change is most easy to implement.

4. **Perturbation:**

Perturbation means a significant deviation from regular or routine state by an outer influence. These changes are perceived as most disturbing to individuals involved most disturbing to individuals involved in particular system. Some changes when introduced disturb the programme for a while but later on they get adjusted for a while but later on they get adjusted or adopted and proved to be beneficial.

5. Value oriented change:

Value oriented change basically involves a shift from one philosophy or a basic ideology in direction a auricular orientations. Adjustment to value oriented change is usually resisted by people. The teachers are required to develop a positive attitude towards every type of change. The teachers can not adjust their values towards such kind of changes may not be retained for long.

1.4.6 Factors Effecting Curriculum Change:

Various factors influencing curriculum change are as given below:

1. Knowledge explosion:

Knowledge explosion is the term used to indicate a rapid increase in amount of information and data available for human. This knowledge explosion demand frequent changes in curriculum to meet the needs of learners encountering with changing world.

2. Contradiction in philosophy (theory) and practice:

When there is refutation between theory and practice of curriculum, the refutation leads to curriculum changes. Various curriculum changes are planned and introduction to eliminate this contradiction.

3. Curriculum evaluation :

Curriculum evaluation is key factor towards curriculum change. After curriculum evaluation, certain recommendations resulting out of evaluation procedures invite the curriculum change.

4. Educational research:

Educational research is essential factor operating behind the curriculum change. Education research carried out in field of curriculum lead us to useful recommendations in curriculum change which results an effective and practical curriculum.

5. Role of teachers:

Teacher is the main handler of curriculum. A teacher has to use and execute a pre-designed curriculum in an efficacious way. Teachers play an important role in curriculum change. Teacher knows the strengths and weaknesses of a curriculum and can suggest very well for improvement.

6. Administration:

Role of administration is to serve the process of curriculum change. Administration has to provide and facilitate the track of curriculum change. Head masters, principals and other authorities influence the curriculum change through their efforts towards it.

7. Availability of resources and facilities:

Curriculum change is deeply influenced by available facilities and resources in particular institution. Availing new and advanced facilities like technology based machines and developing appropriate infrastructure demands change in curriculum.

8. Student needs and abilities:

Modern education system is student centred which lay emphasis on needs and abilities of learners. Hence curriculum change is required if there is change in need and abilities of learners or a curriculum is not satisfying these psychological construct.

9. Employer's view point:

Curriculum reframing is also required if employment needs are changing employer's view point is of great importance in designing and reframing a curriculum. Curriculum is changed in such a way that it can make students fit for job.

10. Financial resources:

Financial resources greatly influence the change in curriculum. Curriculum implementation demands appropriate infrastructure and resources, hence influenced by availability of funds.

11. Globalization:

Globalization plays an important role here because it leads to interlinking and participation of education communities from each corner of the world. These interchanges of educational ideas demand curriculum change. Many concepts can be adapted from other nations and cultures.

12. Social factors:

Social factors like social needs, demands and changing trends look for change in curriculum. Various contemporary issues and social advancement foster the curriculum change for social welfare. As society and education are interrelated concepts.

13. Political factors:

Various state policies influence the policies related to education. Various schemes designed at government level initiate development of new schemes and programmes which lead to curriculum change.

1.4.7 Role of Different Agencies in Curriculum Change

As curriculum change is initiated by many factors. Similarly many agencies also play significant role in curriculum change directly or indirectly few of them are discussed below:

1. Community :

There are many key questions about relationship of curriculum and community needs. Community participation in educational process, community aspiration and community membership in institutional committees influence the curriculum change. Apart from this, parent teacher association and economic status of community people plays a vital role in curriculum change. Student's background decides their needs and aspirations parent's aspirations and expectations also direct curriculum designers toward changing curriculum. A good interaction of community members with school or college personnel somehow results change in curriculum.

2. National and International accreditation bodies:

Another source of positive influence on curriculum change are the various programme structures prepared by various agencies at national and international bodies, such bodies scrutinise programmes and give curriculum specification and serve as a changing force and guide curriculum change. National curriculum framework 2005 is an example of programme launched by NCERT in collaboration with CBSE.

3. Government :

Ruling government and various political ideologies have deep influence on curriculum change. Government launches education policies and educational programmes for the betterment of educational process. Through these policies and programmes state and central government influence the existing curriculum as an agency of change. Directorate of various departments of education such as quality assurance, adult education, technical education, primary, secondary and university education fosters change programme regarding curriculum.

4. Universities and research institutes:

Various universities and research institutes are centres for research on education and its constituent factors. Curriculum is one of the thrust area, in which research is conducted intensively and various suggestions and interventions coming out of those researches are implemented for curriculum change.

5. Educational institutes:

Educational institutes like schools, colleges and training institutes etc. important change agencies when it comes to curriculum. Teachers and educational leaders like head masters, principals and head of the departments are more close to practice of curriculum. Teachers and educational leaders know the change requirement of a curriculum as

they are real executers of various activities at school and college level. Hence such educational institutes and teachers along with educational leaders are supposed to be effective agent to curriculum change.

6. Social clubs:

Social club is a group of people who meet for general interest, occupation or activities. People involved in social clubs may show interest in curriculum improvement and act as an agent to curriculum change.

7. Professional groups:

Professional group means a professional organisation or professional society organised among individuals associated to same profession and are engaged in the professional interest or public interest. Such kind of professionals from educational background such as teachers or researchers may get involved in curriculum change. In this way professional groups act as agents to curriculum change.

Above listed various agencies play a vital role in curriculum change. As discussed previously school, teachers and educational leaders can contribute a lot with regard to curriculum change. They are actual handlers of curriculum. Apart from this, governmental agencies like NCERT and CIBE, various programmes and social groups are effective contributors toward change in curriculum at different educational levels.

1.4.8 Barriers to Curriculum Change:

Changing established practices related to curriculum is never very easy process, particularly when the change is associated with reframing an entire system or approach. Some obstacles happen in the way of restructuring process as well as in implementation part of curriculum change. Wherever innovation takes place, the questions arises like how it spread this new idea, and what gets in the way of practice of such changes are main concerns. Some of the barriers to curriculum change are as following:

1. Lack of professional development:

For effective curriculum change staff must have necessary skills or should be trained properly according to needs of new curriculum design. This all needs money, time and efforts at individual level as well as administrative level. If staff is asked to implement new curriculum without training and required information, they are less likely to welcome the change.

2. Status quo comfort:

Administrators and teachers resist the change because they feel comfortable with the existing curriculum in same the way things are. If an educational institute is performing well, the parents and social members will also not support the change. So there is net to build a changing mindset among stalk holders.

3. Lack of resources:

Lack of infrastructure, books, equipment and the most important lack of man power also effect the curriculum change implementation. For instance, if a curriculum is subjected to technological change but there is scarcity of computers, lack of computer laboratory and other essential equipment and technology skilled staff then it is almost impossible to implement the curriculum change. Hence above mentioned resources are essential for effective curriculum change.

4. Unrealistic expectations:

Unrealistic expectations by the authorities may result in failure of change process. If one expects immediate change and instant success, this will create the situation of overwhelming and will have difficulty in implementing the curriculum change in actual means.

5. Non supporting attitude:

Researchers believe that negative attitude towards curriculum change is most frustrating and a kind of paralysing barrier which is very difficult to overcome. Teachers may feel that students are incapable to accept change and on the other hand principle may have prejudice that teachers will not

be able to cope up with change. Moreover, students and parents may feel that their needs have been ignored here.

6. Lack of time and control:

Lack of time and control badly affect the curriculum improvement processes. Time is needed to accept and adapt the particular change in any aspect of curriculum. Most of the time is devoted to development of new strategies and paper work whereas time should be spent to aware the stalk holders and to train the staff to ease the process of curriculum change.

7. Mindsets :

Another paralysing barrier to curriculum change is lack of interest by stalk holders. Major part of manpower dealing with curriculum shows lack of interest and unwillingness to change the curriculum. They are not sensitive towards importance and benefits of curriculum change. Teachers are somehow in the race of finishing so called syllabus in prescribed time limits and on the other hand administrators are overburdened under other duties. In these way important components of educational process gets ignored unconsciously.

8. Focus on product rather than process;

When experts' works on curriculum change they often focus on completing the curriculum map that is the product of whole concept. But it should be viewed as a process rather than a product. A continuous improvement should be viewed more than finishing the legal documents. Space for further improvement should be kept and it must be teacher friendly and flexible.

9. Tacit and embedded philosophies :

After curriculum change a controversy develops between practice of revised strategies and deep embedded traditional philosophies. Various tacit assumptions create barriers to engross the new ideas in curriculum while documentation.

10. Lack of funds:

Funding is again a significant problem in every curriculum reframing and its implementation in developing nations. Because curriculum change and its implementation demand funds for new infrastructure, technology aspect, development programmes and awareness issues but the truth is that major amount of fund is spent on framing and less amount on implementation of improvised curriculum.

11. Lack of awareness:

Teachers, students and members of society are not that much aware about the significance of the change. They resist it consciously or unconsciously. They are not aware about the benefits of benefits of improved curriculum for them. There is need to design some awareness programmes where required.

Changing practices are never easy, particularly when the change involves an entire system. Most attempts to systemic educational change result difficulty or failure at some levels. However, educational practices must evolve as society evolves, around the educational set up. But administrators may encounter many obstacles or barriers as discussed above when mandating curriculum change. There is need to consider these barriers while designing a curriculum change.

1.4.9 Conclusion:

Curriculum change is as important as curriculum construction. To meet the adjustment needs in ever growing world, curriculum change is an integral part of educational improvement efforts. To assist teacher's planning to be up to date and more nurturing for pupils curriculum change should be kept in considerations. Moreover, various funding possibilities, infrastructure, human resources, needs of students and society should kept in mind while revising the curriculum. Curriculum must be dynamic as changes occur dynamically in social setup. If educators aspire to prepare young pupils mind for the innovative economy and society, they need an innovation mindset. Moreover, to drive

lifelong learning and the success of students later on, one must foster an environment where students learn at their own pace in an encouraging environment which cultivates a deep conceptual understanding of subject matter. When students develop a deep understanding of concepts, they can apply and transfer that learning to new situations and experience success at every stage of life. Creating the learning opportunities that develop mental agility in young people begins with environment that encourage educators to be innovators rather than compliance monitors. With more innovators and open minded educators, the barriers would not last for long.

1.4.10 Suggested Questions

1. Define curriculum change. What are objectives of curriculum change?
2. Why curriculum change is necessary? Explain various factors effecting curriculum change.
3. Give a detailed account of role of different agencies in curriculum change.
4. What are barriers to curriculum change?