

M.A. EDUCATION SEMESTER - I (CBCS)

CORE COURSE - III CURRICULUM DESIGN AND DEVELOPMENT

SUBJECT CODE: CC3

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December 2021, Print - 1

Published by : Director,

Institute of Distance and Open Learning,

University of Mumbai,

Vidyanagari, Mumbai - 400 098.

DTP composed and Printed by

Mumbai University Press Vidyanagari, Mumbai - 400 098.

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M.A. EDUCATION

SEMESTER - I (CBCS)

CORE COURSE - III

CURRICULUM DESIGN AND DEVELOPMENT SYLLABUS

Theory: 60; Internals: 40

Total Marks = 100

Total Credits = 6

Course Objectives

- 1. To explain the conceptual framework of Curriculum Development.
- 2. To analyse the bases of Curriculum Development.
- 3. To understand the conceptual framework and various Curriculum Design
- 4. To study the theories of Curriculum Development
- 5. To understand the Models of Curriculum Design
- 6. To analyse the current trends in Curriculum Development.

Module 1: Curriculum Development: A Conceptual Framework

Credits:2

Unit 1: Concept, Process and Strategies of Curriculum Development

- a) Concept, Need & Principles of Curriculum
- b) Process of Curriculum Development
- c) Elements and Strategies of Curriculum Development

Unit 2: Foundations of Curriculum Development

- a) Philosophical, Sociological and Psychological bases of Curriculum Development
- b) Changing role of the teachers in transacting curriculum
- c) Role of SCERT, NCTE, NCERT in Curriculum Development –

Unit 3: Curriculum Design

- a) Concept, Need and Significance of Curriculum Design
- b) Principles for Curriculum Design-Challenge and enjoyment, Breadth, Progression Depth, Coherence, Relevance, Personalization and choice
- c) Types of Curriculum Design-Subject centered, Learner centered, Problem centered

Module 2: Trends, Theories and Evaluation of Curriculum

Credits:2

Unit 4: Theories and Curriculum Development

- a) Curriculum and Constructivism
- b) Curriculum and Critical Theory
- c) Curriculum and Poststructuralist Theory

Unit 5: Models of Curriculum Design

- a) Objectives model and the Process model,
- b) Tyler's model,
- c) Wheeler's model, Kerr's model

Unit 6: Current Trends in Curriculum Development

- a) Autonomy and Curriculum Development.
- b) Curriculum for Inclusion- Need, Importance and Challenges
- c) E-learning and Curriculum Development

Module 3: Internal Assignment:

Credits:2

Sr. No.	Particulars	Marks
1.	Assignments (2*10)	30
2.	Case study/Projects/Posters and exhibits /Seminar/ Workshop/ Cooperative Learning /Blended Learning/Constructivism/Nai-Talim- Experiential Learning /Open Book Assignment/ Class test	10

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1

CONCEPT, PROCESS AND STRATEGIES OF CURRICULUM DEVELOPMENT

Unit Structure

- 1.0 Objectives
- 1.1 Introduction
- 1.2 Concept, Need & Principles of Curriculum
 - 1.2.1 Meaning and Concept of Curriculum: Definitions
 - 1.2.2 Why is curriculum important?
 - 1.2.3 Principles of Curriculum
- 1.3 Process of Curriculum Developments
 - 1.3.1 Stages in The Process of Curriculum Development
- 1.4 Elements and Strategies of Curriculum Development
 - 1.4.1 Elements of Curriculum Development
 - 1.4.2 Strategies of Curriculum Development
- 1.5 Let us Sum Up
- 1.6 Unit End Exercise
- 1.7 References

1.0 OBJECTIVES

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

- Define the concept of Curriculum
- State principles of Curriculum
- Explain process of Curriculum Development
- Describe elements and strategies of Curriculum Development

1.1 INTRODUCTION

The word "Curriculum" began as a Latin word which means "a race" or "the course of a race. "Accordingly a curriculum is the instructional and the educative program by which the pupils achieve their goals, ideals and aspirations of life.

A curriculum can be called as a plan for learning, which contains assumptions about the purpose of an education in our society. It also has a definite structure through which the vision of the planner can be translated into learning experiences of the learner. Hence any curriculum comprises two major dimensions i.e. vision and structure.

- All the learning which is planned and guided by the school, whether
 it is carried on the groups or individually, inside or outside the
 school.
- Kerr defines curriculum as, "All the learning which is planned and guided by the school, whether it is carried on in groups or individually, inside or outside the school."
- Braslavsky states that curriculum is an agreement amongst communities, educational professionals, and the state on what learners should take on during specific periods of their lives.
- Outlines the skills, performances, attitudes and values pupils are expected to learn from schooling. It includes statements of desired pupil outcomes, descriptions of materials, and the planned sequences that will be used to help pupils attain the outcomes.

Traditional Concept: The traditional curriculum was subject-centered while the modern curriculum is child and life-centered.

According to the **Modern Concept** of Curriculum, it does not mean only the academic subjects, traditionally taught in the schools but it also includes the sum total of experiences that pupil received through the manifold activities that go on in the school, classroom, library, laboratory, workshop, playgrounds and in the numerous informal contacts between teachers and pupils. In this sense, curriculum touches the life of the students at all points and helps in the evaluation of a balanced personality.

Modern education is the combination of two dynamic processes. The one is the process of individual development and the other is the process of socialization, which is commonly known as adjustment with the social environment.

1.2 CONCEPT, NEED & PRINCIPLES OF CURRICULUM

1.2.1 DEFINITIONS:

Cunningham – Curriculum is a tool in the hands of the artist (Teacher) to mould his material (Pupils) according to his ideas (Aims and objectives) in his studio (School)

Morroe – Curriculum includes all those activities which are utilized by the school to attain the aims of education.

Crow and Crow - The curriculum includes all the learners' experience in or outside school that included in a program which has been devised to help him developmentally, emotionally, socially, spiritually and morally.

1.2.2 Why Curriculum is Important?

1. A steady & organized path

Your curriculum is essentially a series of activities and learning outcome goals related to each subject. It serves as a great map, outlining where you need to go and how to get there. Curriculum

Concept, Process and Strategies of Curriculum Development

docs are not created overnight: A great deal of thought, time, effort, and expertise go into their development, so don't try to reinvent the wheel.

If you're feeling passionate about putting your own special flair on your teaching, don't fret! While the curriculum charts the path and provides ideas along the way to support your teaching, there is always room for interpretation. Let the curriculum serve as a guide path and sprinkle in your own style as you go. And hey, who doesn't love a good backline master or curriculum activity? They've been created to help you and your students, so go ahead and use them!

An example of the steady path of structure that a curriculum provides lies in its framework. Larger learning goals are broken down into more specific ones and desired outcomes. In this way, you can see the big picture and better understand how smaller lessons help you teach overarching concepts.

A fifth-grade student in a physical education class may be required to learn 'movement.' That's fairly vague. But if you dig a little deeper, you'll see that your students are to learn how to detect errors in movement, carry out movement sequences, and perform transport skills, along with a few other pieces of the puzzle. Once you see the structure (or organization) of the learning outcome, everything becomes clearer.

2. Progress

A well-crafted curriculum serves as a reference to ensure that you're on the right track. Its components are designed to develop concepts, from a basic level to increasingly complex topics or skills.

It's important to remember that a curriculum is not an isolated signpost for a single school year. Rather, it's a part of a much bigger puzzle that's connected to the curriculum for every other grade. Students make progress from year to year. By following the curriculum with your students, you're preparing them to continue on their journey the next year, and each year after, in a more logical and organized fashion.

While learning how to write important sight words and read basic texts are all the rage in one grade, in the next grade, students may be writing longer pieces in the form of short stories and reading more independently with lengthier texts. While adding and subtracting are the crucial skills to learn in the first few years of school, they give way to multiplication, division, and eventually, algebra and calculus as students build upon their foundations.

Progress is essential and curriculum docs allow this sequential learning to take place.

3. Common goals

The goals for each subject area aren't just for students — they're also for teachers. We have goals set out in the curriculum for what we need to teach in a given year, and our students have goals for what they need to learn. Clearly, there's a lot of overlap there; shared goals make it easier for instructors to align their teaching methods with students' academic needs to ensure that they succeed.

Beyond creating shared goals between teachers and students, curriculum also standardizes the learning goals for an entire school and provides a clear path for students to progress from one grade to another. Students must meet certain core competencies before moving on to advanced subjects, such as mastering algebra before ever attempting calculus. Without such a standardized curriculum in place, instructors would have to create their own learning objectives and somehow coordinate with one another to ensure that their students are on track.

Perhaps more importantly, students who complete high school and achieve all the learning objectives set out for them will be ready for post-secondary education or the workforce with a similar baseline of skills, making it easier for employers to identify truly qualified candidates.

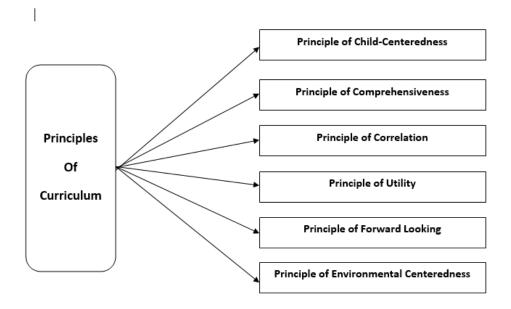
4. Always changing

Finally, embracing curriculum is worthwhile for yourself and your students because it's not something static. Does are regularly revisited and updated to reflect the current needs of students and society at large.

These updates and changes are the results of collaboration and research. Your students will benefit in major ways from the latest information and from having emphasis placed on the skills that are really needed in today's world.

Certain skills or learning goals may fall out of favor over time (hello, cursive writing!) and are generally replaced with more pertinent goals. As a teacher, you know that there simply isn't enough time in a school year to learn everything. Thus, it's especially important to zero in on the most pressing needs and goals for students.

These days, tech skills are high on the list of needs. Students have to be tech-savvy in order to do well in the modern world, and teachers and schools have a responsibility to prepare them for just that (although, my six-year-old is probably surpassing me in the tech-savvy realm at this point ... Okay, so maybe we need to teach these basic skills so that our kids and students can help *us* out with technology in a few years!).



(Figure 1.2.3)

Principle of Child-Centeredness: It means that what is to be given to children in the form of learning experiences at a particular age and grade should properly suit their age, abilities, capacities, interests, mental development and previous experiences. Therefore, in all circumstances it should fulfill the needs of pupils.

Principle of Comprehensiveness: Curriculum must have necessary details because merely a list of topics will not serve the purpose either of the students or the teachers. Material aids, techniques, life situations, etc should be listed in the curriculum, so that these can serve as a guide to the teachers and authors of textbooks.

Principle of Correlation: The curriculum should be such that all subjects are related to each other. Teaching all subjects separately would be non psychological, so it must kept in mind that the subject matter of various subjects has some affinity with each other.

Principle of Utility: According to this principle, only those topics, subject material and learning experiences should be included in the curriculum which is found to possess any utility to the students.

Principle of Forward Looking: Only those Topics, contents and learning experiences should be included which may prove helpful to the student in leading their future life in a proper way.

Principle of Environmental Centeredness: Curriculum is developed keeping in view the physical and social environment of the students. Therefore the selection of subject material and learning experiences should be based on or linked with events, the problems and situations prevalent in their physical and social environment.

1.3 PROCESS OF CURRICULUM DEVELOPMENT

Curriculum development is a process in which different components such as formulation of curriculum policy, curriculum research, curriculum planning, its implementation and then its evaluation play an important role. The curricular framework generates creative thinking at various levels of decision making such as the national, state, regional and district levels. It provides a great deal of flexibility to provide space for local specificity and contextual realities.

International experiences have shown that neither the completely centralized approach nor the totally decentralized approach to curriculum development has really been successful.

1.3.1 Stages in The Process of Curriculum Development



(Figure 1.3.1)

Formulation of Objectives:

Objectives are specific statements of purpose to suggest immediate result. Objectives help our planners to develop purposeful instructional programs. You cannot decide what or how to teach, without knowing why you do it.

An organization of education is based on the curriculum. The curriculum development is done in view to realize the objectives of education. Thus the curriculum is the means for achieving the educational objectives.

The objectives of teaching mathematics are formulated and determined in behavioral terms. While formulating and determining objectives following points should be kept in mind:

Concept, Process and Strategies of Curriculum Development

- That the set of objectives formulated should indicate both the desired behavior and the type of situation in which it is to occur.
- An objective should be expressed in terms of desired pupil behavior rather than of teacher behavior.
- An objective should be specifically stated so that it is possible to infer some appropriate learning activities.

> Selection and Organization of appropriate learning-material

The selection of suitable content depends to a great extent on the extent on those basic considerations that underlie the formulation of objectives. For eg- The objectives recognize four significant aspects of mathematical learning-

- Contents or meanings
- Computational skills
- Problem-solving(reasoning), and
- Mathematical attitudes

Concepts play an important role in the reasoning and also facilitate the learning of computational skills. Great emphasis should be placed upon those basic concepts and skills of mathematical thinking and problem-solving that most people should know in order to function intelligently as members of society.

> Selection of Suitable Learning Experiences

The concept of learning-experience as it emerges from the thinking about the learner and the learning principles accepted as the basis for objectives, can be broadly described as a desired change in the mental makeup of a child and it can be brought about through, "Activities leading to the discovery of connections, relationships and meaning which have significance in the directing or ordering of conduct." Learning experience, envisaged here, place great importance on the pupil and the learning situation, instead of on the leather and the content. The proper organization of learning experiences depends upon a number of factors such as-

- Age, needs and previous experiences of the learner.
- Needs of a particular community
- Abilities of the children
- Facility available in the school
- Readiness, maturity and capabilities of the child.
- Attention and interest of the learner

Each teacher should feel free to adjust the objectives, content and activities to suit his requirements. However, the following

- criteria should be kept in view while selecting and organizing learning experiences:
- Learning experiences should be appropriate to behavior changes defined under objectives.
- They should be suitable for the content area.
- They should be practicable.
- They should be adequate and effective.

Much reliance is therefore, put on the judgment of the teachers who framed them.

> Selection of Suitable Material for Evaluation of Curriculum

Evaluation and curriculum are regarded as closely related parts of the same educative process, not as distinct and separate functions.

No curriculum can therefore be said to have been planned without laying down some basic principles of evaluation. Evaluation comes in at the planning stage when objectives are identified.

The needs, interests, attitudes, and abilities of children should be kept in mind while selecting suitable material for the *evaluation of the curriculum*.

National agencies like the National Council of Educational Organization and the Council of Boards of School Education need to undertake the following tasks:

- Laying down the expected levels of attainment in each curricular area of all the stages of school education.
- Developing conceptual materials and prototypes on childcentered, activity-oriented, and competency-based teachinglearning materials;
- Generating various kinds of tests, which could be meaningfully employed for assessing cognitive and noncognitive learning outcomes, making them available to the state agencies;
- Organizing training programs for paper setters of different boards.

1.4 ELEMENTS AND STRATEGIES OF CURRICULUM DEVELOPMENT

1.4.1 ELEMENTS OF CURRICULUM DEVELOPMENT

here are five key elements of curriculum development, according to Tyler "it is essential as a part of comprehensive theory of organization to show just what are the elements will serve satisfactory as organizing elements." According to Herrick and Tyler, following are the components and elements of curriculum development

- 1. Situational analysis
- 2. Formulation of objectives
- 3. Selection of content, scope and sequence
- 4. Activities, strategies and method of teaching
- 5. Evaluation

1) Situational Analysis

Situational analysis means the analysis of different conditions such as emotional, political, cultural, religious and geographical conditions of a country. This will help the curriculum planners in the selection of objectives, selection of organization of learning materials and in suggesting appropriate evaluation procedures.

2) Formulation of Objectives

There are four main factors for formulating the objectives of education. These are

- 1. The society
- 2. The knowledge
- 3. The learner
- 4. The learning process

All of these factors are to be considered while selecting and formulating the educational objectives.

3) Selection of Content

One of the important elements is the selection of content for a subject. At the time of subject matter selection, the following factors are to be kept in mind:

- 1. Available sources and resource
- 2. Demand of the society
- 3. International needs
- 4. Level and age of the learner or student
- 5. Methods of content organization
- 6. Number of courses offered
- 7. Quantity and qualification of teaching staff
- 8. Scope of subject matter
- 9. System of examination
- 10. Type of society and culture

4) Strategies and Method of Teaching

These are strategies and methods of teaching adopted by the teachers during instruction and learning experiences. This will certainly not be fair to ask a teacher for achieving certain objectives without giving any guidelines. In most of the countries curriculum development is a centralized process. Teachers are not directly

Concept, Process and Strategies of Curriculum Development

involved in this phase. Most of the teachers do not know the process of achieving desired goals. After determining the goals and objectives the next problem is the selection of strategies and methods of teachers. What we should give to our students. Should a curriculum be fixed or flexible, constant, common or differentiated?

5) Evaluation

Evaluation is one of the dynamic processes, which needs a continuous research and evaluation for its betterment in order to cope with the variable demands of the society and bring about desirable changes. Curriculum evaluation is not a student evaluation. It is a broader term being used to make judgment about the worth and effectiveness of it. With the help of evaluation phase experts can modify the curriculum by bringing about desirable changes.

1.4.2 STRATEGIES OF CURRICULUM DEVELOPMENT

There are few strategies that play a significant role in the curriculum development.

- **Problem Identification:** Firstly while developing a curriculum, the problem areas need to be identified to meet the needs of the curriculum as it will help to improvise the content formation. It is an important strategy in curriculum development as it highlights the issues of relevance that need modification for an effective curriculum.
- Needs Assessment of Learners: Curriculum Development should be viewed as a process by which meeting student's needs lead to improvement of student's learning. It should include the desired outcomes or expectations of a high quality program, the role of an assessment, the current status of student's achievements and actual program content. An effective curriculum development process usually entails a structured needs assessment to gather information and t guide the curriculum development process.
- Goals and Objectives: Curriculum goals are general and broad statements that lead toward long-term outcomes. Specifically, goals are always for reaching the objectives and based on the ideas that they lead students towards being better able to be productive members of the society.
- Educational Strategies and implementation: Educational strategies must be clear as per the requirement of the curriculum. An innovative and productive approach will help the students gather relevant information from the sources provided by their teacher. Proper implementation of the educational strategies will fetch maximum output in the process of curriculum development.
- **Feedback and Evaluation:** The curriculum development cycle ends and then begins again with a careful evaluation of the effectiveness and impact of the program. Feedback helps the teacher to improve and modify the framework of curriculum as it provides an interpretation of performance.

1.5 LET US SUM UP

Concept, Process and Strategies of Curriculum Development

Curriculum is an instructional and educative program, by following which the pupils achieve their goals, ideals and aspirations of life. The curriculum should integrate cognitive, affective, and psychomotor objectives and abilities.

Curriculum development has to satisfy the different foundations of curriculum and thereby they could be adopted in multicultural classroom settings. Hence, great effort should be taken to frame such a curriculum before executing the process of teaching at all levels of education.

1.6 UNIT END EXERCISE

- 1) Describe concept and meaning of curriculum.
- 2) Explain principles of good curriculum
- 3) Describe strategies and procedure of curriculum development.
- 4) What are elements of curriculum development
- 5) "Curriculum is important." Explain

1.7 REFERENCES

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FOUNDATIONS OF CURRICULUM DEVELOPMENT

UNIT STRUCTURE

- 2.0 Objectives
- 2.1 Introduction
- 2.2 An Overview
- 2.3 Philosophical, Sociological and Psychological bases of Curriculum Development
- 2.4 Changing roles of the teachers in transacting curriculum
- 2.5 Roles of SCERT, NCTE, NCERT in Curriculum Development
- 2.6 Unit End Exercise
- 2.7 References

2.0 OBJECTIVES

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

- Understand the philosophical, sociological and psychological basis of Curriculum Development
- Explain the need for the changing role of the teachers in transacting curriculum.
- State the role of SCERT, NCTE, NCERT in Curriculum Development

2.1 INTRODUCTION

Curriculum: It is the core of any educational system and is derived from the Latin word 'Currere' which means a race to run or proceed. Etymologically, curriculum means the foundation which the pupil and the teacher cover to reach the goal. It is also regarded as a 'course of the race' where individuals have to follow in that particular course undertaken. It is a sequence of planned experiences which students have to follow to achieve their target both in content and skill-based learning. For educators, curriculum is a ready reckoner which informs them the essentials in the teaching learning process. As per the curriculum, the teacher provides varied and rigorous learning experiences. It provides a structure to facilitate student's learning and instruction.

Curriculum Development an on-going process, which is needed to be changed as per the needs of the society. It is the multi-stage process for improving the course that is needed to be taught. The overall framework of curriculum development includes- analysis, building, implementation, assessment and evaluation. The exact process will be different from

institutions as per the philosophy of the institution. These plans have to be reviewed, revised and upgraded frequently in and as per the need arise.

2.2 AN OVERVIEW

Curriculum is the base, the pillars upon which the educational system lies. Curriculum development is the vital component of educational programme. The answers to what is needed to be taught, why it needs to be taught and how it is needed to be taught is provided in the curriculum. Philosophy of the nation, along with the philosophy of the institution plays a pivotal role in providing the roots of any curriculum.



The needs of the society have also to be kept in mind and the psychology of the learner is also important while framing the curriculum. Curriculum development therefore forms three bases for any construction of curriculum.

- a) Philosophical bases of curriculum
- b) Sociological bases of curriculum
- c) Psychological base of curriculum

2.3 PHILOSOPHICAL, SOCIOLOGICAL AND PSYCHOLOGICAL BASES OF CURRICULUM DEVELOPMENT

Philosophical Bases of Curriculum:

Philosophy is considered as one of the main bases of the curriculum. Depending upon the philosophy of the nation, so will be the philosophical base of curriculum. It is then integrated into the philosophy of the educational institution. The base thus depends upon fundamental beliefs of the curriculum planner. The philosophical determinants are based upon fundamental principles of Educational Philosophy, national objectives, schools of educational thoughts.

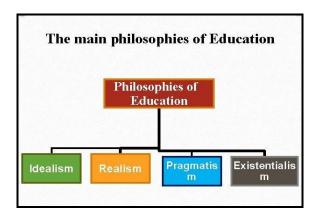
Philosophy centers around the beliefs about the nature of the people, the sources of truth and values that provide life, constitution for a good life etc. The duty of the teachers is to imbibe the philosophy of the nation and

the institutional philosophy and blend it through the curriculum. Several disciplines impact the curriculum

Philosophical Bases Include

- Educational Philosophy
- School of Thought
- National Objectives and Policies

There are many philosophies of life and we also have different philosophies of education



The Main Philosophies of Education are Described Below:

A) <u>Idealism</u>: The philosophers such as Plato, Descartes, Hegel believed that truth and values are eternal and that the human race needs to discover them. Individuals according to idealism philosophy already have ideas within them and it is through education these ideas are brought out. If we apply the philosophy of idealism to the educational philosophy, it can be said that students have the tendency to remain good and do the right things within themselves. However, this tendency to remain good and do the right things has to be brought out through education.

Through education, the children must be helped to discover spiritual goodness and apply it to their life. The curriculum should bring out in them to a point where the natural spirit is related to the supernatural power or God. The curriculum must provide opportunities so that the inner goodness of the student is further strengthened and that the student does things to please God. Schools must include only those ideas which have moral, spiritual and moral values

Realism: Believes that the truth can be discovered by studying the world of reality and matter. As per this philosophy science and philosophy both together play an important role as science is a method for objective study of reality. As per the philosophy of realism.

Foundations of Curriculum Development

According to this philosophy children were born ignorant. They did not know about the reality of the world, and they needed to be taught in order to enjoy the reality of the world. If we apply realism to the philosophy of education, the teacher's role is important as children will learn from the teachers and their own knowledge. The knowledge of the teacher is more important for the learner in realism. The school should thus develop virtues such as honesty, diligence which are real and permanent in nature. Education should thus prepare the children for a good life.

- **C**) **Pragmatism:** This school of philosophy was propagated by John Dewey who believed that the children are neither born with goodness nor ignorance. However, they do possess the physical and mental equipment wherein they can participate in the world around them. According to Dewey, society keeps changing and so does its culture and thus there are no fixed values. The ideas are temporary and have to be upgraded and refined. Changing human experiences, truth and value also change. Therefore, if we apply this philosophy to education, children learn through interaction in and around the surroundings. However, this learning is not fixed and will keep on changing and refined from time to time. The learners need to be more progressive and mature in values, beliefs and knowledge as they will. However, the past experience is not irrelevant as they provide a base for new learning to take place. Learning should emphasize on how objects fit into or work in the environment. These are later on explored from their society from time to time. The teacher should therefore not provide information but provide direct opportunities and experiences so that children are able to learn from experiences. Such a learning should be the child's world rather than that of an adult
- **D)** Existentialism: A 20th century philosophy that focuses upon and investigates the existence of how humans find themselves in the world they live in. According to this philosophy, first the human exists and then each human spends their life changing their nature or essence. In other words, individuals through their own free will, their own choices, and personal responsibilities find meaning of self and life. Followers of this philosophy search who they are throughout their life and through their own experiences, beliefs and outlook make their own choices. Individuals are free and responsible agents to determine their own development through their own acts of will. Existentialism is a philosophical theory or approach which emphasizes the existence of the individual person as a free and responsible agent determining their own development through acts of the will.

If existentialism is applied to education, the child as an individual is in search of meaning to this meaningless world he or she is living in.

Each child should create his own ideas depending upon his own choices and experiences. It is the duty of education to concentrate on the

perceptions and feelings of the child so that he is able to understand his reaction and respond accordingly to the situations he faces in life. This makes him responsible and encourages taking the necessary action so that it is applied to life. The duty of the teacher therefore should be of a facilitator, a mentor rather than an instructor.

Philosophical bases play a very important role in curriculum construction through formulation of educational goals because they are determined on the basis of the philosophy and themselves determine the curriculum.

Sociological Bases of Curriculum:

In order to prepare a curriculum, the study of the society is very important. It Forms an integral part of curriculum construction as students are part of the world they live in. The school is just a small part of the world they live in. Thus, the school has to prepare the child to face the world. School has to thus keep the needs of the society and shape the children as per the societal goals. They not only have to shape themselves as per the needs of the society and nation but also have to keep in mind the demand of the world and prepare them to face the challenges of life. Students are the future and are vital resources of solving issues. Through the curriculum, school must prepare the child to adapt themselves in the large society. Therefore, the curriculum planner should consider the following issues which the children will face in future. They are as follows

- Goals of the nation: Each nation has its own goals and depending upon the goals of the nation so will its curriculum be. The curriculum is an effective vehicle to achieve these goals.
- **Structure of the Society**: it differs from nation to nation and also within the nation. While framing the curriculum, the structure plays a very important role.
- **Family Patterns**: Patterns of the family whether joint or nuclear is important to be kept in mind which construction of a curriculum
- **Social Needs**: Needs of the society is vital as education is a powerful tool to solve social problems.

Psychological Base of Curriculum:

While constructing a curriculum, the psychological base plays a pivotal role. The needs of the learner, their intelligence, catering to the differently abled, their age level is all taken into consideration while framing a curriculum.

It includes

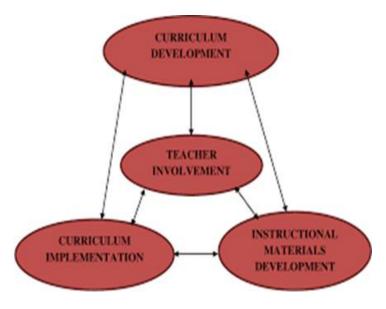
• Learner's abilities and interests: The curriculum is developed for the effectiveness and efficiency of the learners and hence while framing a curriculum, it is vital to keep the abilities of the learners along with their interest at the paramount.

Foundations of Curriculum Development

- Stages of Development: While constructing a curriculum, it is important to keep in mind the learner's stages of development so that the teacher can come down to the level of the children as per their age so that they will be able to comprehend it better.
- Contribution of Psychology: Psychology has helped to enhance our understanding of the process of learning, theories of learning, motivation, personality development, individual differences and group dynamics. These must be borne in mind while framing a curriculum.
- **Principles of Mental Health:** Mental Health plays an important role in the teaching learning process. A sound understanding of the mental health of the learner helps to have an effective curriculum. If the curriculum is meaningful, the learners will automatically develop a healthy attitude towards learning.

2.4 CHANGING ROLES OF THE TEACHERS IN TRANSACTING CURRICULUM

Teachers play a pivotal role in transacting curriculum. Teachers are regarded as most knowledgeable in the teaching learning process and are responsible for introducing the curriculum in the classroom. Teachers therefore have multi-faceted roles and responsibilities in curriculum organization and transaction. In order for curriculum development to be effective and schools to be successful, teachers must be involved in the development process. An effective curriculum should reflect the philosophy, goals, objectives, learning experiences, instructional resources, and assessments that comprise a specific educational program. It can be subject specific or a generalized overview of expectation. It must be a usable tool to assist teachers in the development of individualized strategies and the methods and materials necessary for them to be successful.



The most important person in the curriculum implementation process is the teacher. With their knowledge, experiences and competencies, teachers are central to any curriculum development effort. If another party has already developed the curriculum, the teachers have to make an effort to know and understand it. So, teachers should be involved in curriculum development. For example, a teacher's opinions and ideas should be incorporated into the curriculum for development. On the other hand, the curriculum development team has to consider the teacher as part of the environment that affects curriculum (Carl, 2009). Hence, teacher involvement is important for successful and meaningful curriculum development. Teachers being the implementers are part of the last stage of the curriculum development process.

- Teachers want to enjoy teaching and watching their students develop interests and skills in their interest area.
- The teacher may need to create lesson plans and syllabi within the framework of the given curriculum since the teacher's responsibilities are to implement the curriculum to meet student needs.
- The level of teacher involvement as a center of curriculum development leads to effective achievement of educational reform. Therefore, the teacher is an important factor in the success of curriculum development including the steps of implication and evaluation.
- ❖ Teachers can contribute by collaboratively and effectively working with curriculum development teams and specialists to arrange and compose martial, textbooks, and content. Teacher involvement in the process of curriculum development is important to align content of curriculum with students needs in the classroom.

2.5 ROLE OF SCERT, NCTE, NCERT IN CURRICULUM DEVELOPMENT

SCERT is **responsible for preparing the curriculum**, **prescribing** syllabi, course of study, academic calendar for these Courses. ... SCERT is responsible for material development both for children and support materials for teachers

State Council for Educational and Training (SCERT) is an apex body, responsible for quality education in the state. ... SCERT is concerned with academic aspects of school education including formulation of curriculum, preparation of textbooks, teacher's handbooks and teacher training.

It is an autonomous body entrusted with planning, implementation and evaluation of all academic programs from pre-school to higher secondary levels. SCERT is concerned with academic aspects of school education including formulation of curriculum, preparation of textbooks, teacher's

handbooks and teacher training. It advises the Government on policy matters relating to school education.

Role of Scert in Curriculum Development

- > To organize and implement the special educational projects sponsored by UNICEF, NCERT and other agencies for qualitative improvement of school education and teacher educators.
- > To prescribe curricula and textbooks for the school and teacher training institutions.
- > To produce instructional materials for the use of teacher- educators.
- > To arrange in-service training for different categories of teachers, inspecting officers and teacher-educators and coordinate the work of other agencies operating at the state level.
- > To organize programs including Correspondence-cum- Contact Courses for professional development of teachers, teacher-educators and inspecting officers.
- To supervise the working of the Teacher-Training Colleges, Secondary Training Schools and Elementary Training Schools.
- > To provide extension service to Teacher-Training Institutions at all levels in the state.
- > To conduct studies and investigations on the various problems of education.
- To evaluate the adult and non-formal education programs entrusted by the Government.
- > To conduct the public examinations especially at terminal stages like the end of Class HI and Class IV etc. with a view to selecting candidates for scholarships through such examinations.

Role of NCTE in Curriculum Development

National Council of Teacher Education(NCTE): The main objective of the NCTE is to achieve planned and coordinated development of the teacher education system throughout the country, the regulation and proper maintenance of Norms and Standards in the teacher education system and for matters connected therewith.

The mandate given to the NCTE is very broad and covers the whole gamut of teacher education programmes including research and training of persons for equipping them to teach at pre-primary, primary, secondary and senior secondary stages in schools, and non-formal education, part-time education, adult education and distance (correspondence) education courses. The National Council of Teacher Education

- Undertake surveys and studies pertaining to all aspects of the teacher education and publish the corresponding results.
- For the preparation of suitable plans and programmes regarding the field of teacher education, it makes recommendations to both the state and central governments, universities, University Grants Commission (UGC), and other recognised institutions.
- It coordinates and monitors the teacher education system throughout the country.
- It lays down the guideline for the minimum qualifications needed for an individual to be a teacher in schools and recognized institutions.
- It lays down guidelines for the provision of physical and infrastructural facilities, staffing pattern etc. for the compliance by recognised institutions.
- It lays down standards with respect to examinations, the major criteria for such admission as well as schemes for courses or training.
- It promotes and conducts research and innovation in schools and recognized institutions and then disseminates the results thereof.
- It examines its own laid-down guidelines, norms and standards for the improvement.
- It identifies the recognized institutions and sets up new institutions for the developmental programme of the teacher education system.
- It takes up necessary steps for the prevention of the commercialization of teacher education.
- It also performs other function that are entrusted to it by the central government

Role of NCERT in Curriculum Development

The National Council of Educational Research and Training (NCERT) is an autonomous organization setup in 1961 by the Government of India to assist and advise the Central and State Governments on policies and programmes for qualitative improvement in school education.

The NCERT performs the important functions of conducts and promotes educational research, improve educational techniques, practices and research findings, develops curriculum instructional and exemplar materials, methods of teaching, techniques of evaluation, teaching aids etc. ... NCERT has a large publishing house.

The major objectives of NCERT and its constituent units are to: undertake, promote and coordinate research in areas related to school education; prepare and publish model textbooks, supplementary material, newsletters, journals and develops educational kits, multimedia digital materials.

Major Objectives of The NCERT in Curriculum Development are to

- ✓ Undertake, aid, promote and coordinate research in areas related to school education;
- ✓ Prepare and publish model textbooks, supplementary material, newsletters, journals and other related literature;
- ✓ Organize pre-service and in-service training of teachers;
- Develop and disseminate innovative educational techniques and practices;
- ✓ Collaborate and network with state educational departments, universities, NGOs and other educational institutions;
- ✓ Act as a clearing house for ideas and information in matters related to school education;
- ✓ Act as a nodal agency for achieving goals of universalisation of elementary education.

In addition to research, development, training, extension, publication and dissemination activities, the NCERT is an implementation agency for bilateral cultural exchange programmes with other countries in the field of school education. The NCERT also interacts and works in collaboration with the international organizations, visiting foreign delegations and offers various training facilities to educational personnel from developing countries.

2.6 UNIT END EXERCISE

Write long answer:

- 1) Explain the basics of the curriculum.
- 2) Elucidate the role of NCERT in curriculum development
- 3) Explain the role of NCTE in curriculum development
- 4) Explain the role of SCERT in curriculum development

Write short notes on:

- 1) Philosophical bases of curriculum
- 2) Sociological bases of curriculum
- 3) Psychological bases of curriculum

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CURRICULUM DESIGN

Unit Structure

- 3.0 Objectives
- 3.1 Introduction
- 3.2 Concept, Need & Significance of Curriculum Design
 - 3.2.1 Concept of Curriculum Design
 - 3.2.2 Need and significance of curriculum Design
 - 3.2.3 Importance of curriculum development
- 3.3 Principles for Curriculum Design-Challenge and enjoyment, Breadth, Progression Depth, Coherence, Relevance, Personalization and choice
 - 3.3.1 Principles of Curriculum Development
 - 3.3.2 Test learner's limits & exciting to learn
 - 3.3.3 Span of knowledge
 - 3.3.4 Structure like building blocks
 - 3.3.5 Every detailed aspect of learning experience
 - 3.3.6 Harmonize the total experience
 - 3.3.7 Value of what they are learning
- 3.4 Types of Curriculum Design
 - 3.4.1 Introduction of subject centered curriculum design
 - 3.4.2 Aim of subject centered curriculum design
 - 3.4.3 Characteristics of subject centered curriculum
 - 3.4.4 Drawbacks of subject centered curriculum
 - 3.4.5 Introduction of learner centered curriculum design
 - 3.4.6 How to create learner centered classes?
 - 3.4.7 Program Design Support
 - 3.4.8 Characteristics of learner centered curriculum
 - 3.4.9 Advantages of learner centered curriculum
 - 3.4.10 Disadvantages of learner centered curriculum
 - 3.4.11 Problem centered curriculum design
 - 3.4.12 Advantages of problem centered curriculum design
 - 3.4.13 Disadvantages of problem centered curriculum
- 3.5 Let us Sum Up
- 3.6 Unit End Exercises
- 3.7 References

3.0 OBJECTIVES

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

- Define the concept of curriculum Design
- State importance of Curriculum Design
- Explain principles of Curriculum Development
- Differentiate between different types of Curriculum Design

3.1 INTRODUCTION

A curriculum is considered the "heart" of any learning institution, which means that schools or universities cannot exist without a curriculum.

The new concept of curriculum is very broad based. It consists of the totality of experience that pupils receive through the manifold activities that go on in the school, in the classroom, library, laboratory, workshop and play-ground and in the numerous contacts between the teachers and pupils. It is neither dogmatic nor rigid in its form and structure.

The term Curriculum Design refers to the period for creating the overall blueprint of the course. In this phase, teachers organize the instructional units for their course. A usual curriculum involves planning readings, activities, lessons, and assessments that achieve academic goals. It is a deliberate, purposeful, and systematic organization of the curriculum. The ultimate goal of a design is to improve student learning. That is why instructors design each curriculum with a specific academic purpose.

3.2 CONCEPT, NEED & SIGNIFICANCE OF CURRICULUM DESIGN

3.2.1 Concept of Curriculum Design

There are as many interpretations of curriculum design as the definitions of curriculum.

One of the most widely accepted is the one developed by Hilda Taba. "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 a curriculum theory which establishes the sources to consider and the principles to apply".

- 1. Objectives
- 2. Content
- 3. Learning experiences
- 4. Teaching strategies
- 5. Evaluation

The way in which the elements mentioned by Hilda Taba are related to each other which quite often specifies the kind of curriculum design that is portrayed. For example, the type of design that is dominated by content consisting of predominantly factual information is quite often characterized by teaching strategies that are largely expository in nature, learning experiences which depict the learner as a passive receiver, objectives which emphasize a narrow cognitive perspective and evaluation procedures which are formal testing procedures.

Such type of design is often referred to as a subject centered design. On the other hand, the child – centered design --portrays the relationship between the elements in. a different, and distinctive manner. The tendency to rationalize a curriculum pattern in terms of a single principle, such as child – centeredness or subject – centeredness is an oversimplification. It is a point worth stressing. It is not sufficient to enter the rationale for a design on some single criterion or principle as a curriculum has to do with reaching something to somebody. It can be neither entirely content centered nor child centered in the sense of neglecting either the nature of the learning or the nature of content

3.2.2 Need and Significance of Curriculum Design

- 1. **Realization of Educational Objectives:** An organization of education is based on the curriculum. The curriculum development is done in view to realize the objectives of education. Thus the curriculum is the means for achieving the educational objectives.
- 2. **Proper use of Time and Energy:** It provides the guidelines to the teachers as well as to students, what a teacher has to teach and what the students to learn?.
- 3. <u>Acquisition of Knowledge:</u> The curriculum is the means for acquiring knowledge. Actually human knowledge is one but is divided into subjects for the convenience and organization point of view. Thus the curriculum is designed for the different subjects.
- 4. **Determining Structure of Content:** Every subject's content has its wide structure which is to be taught lower level to the higher level. Thus the main task of curriculum development is determining structure of content for a particular stage teaching. Thus the curriculum of different subjects is designed from primary level to university level.
- 5. **Development of Personality:** The curriculum is also important and significant from personality development of the student. The

- curriculum is designed which helps in the development of good qualities in students. It helps in developing physical, social and moral qualities of learners.
- 6. **Preparation of Text Book:** The curriculum provides the guide line and bases for preparing text books for the use of students and subject teachers. If the curriculum is changed or codified, the test books are also changed. A good text has wide coverage of curriculum content of subjects.
- 7. Conducting Examination: Our education is examination centered. The students have to obtain good marks in the examination. Thus examination papers are prepared as per curriculum of the subject and students also prepare the content for the examination. Thus, curriculum is the basis of teaching, learning and testing.
- 8. <u>Organizing Teaching and Learning Situation:</u> The teaching and learning situation is organized in view of the curriculum teaching work is also assigned with help of curriculum.
- 9. **Decision about Instructional Method:** The instructional method is selected and used in view of the curricular. The same content is taught from memory to reflective level. It may be teacher centered or learner centered.
- 10. **Development of Knowledge, Skill and Attitude:** The nature of curriculum provides the basis for the developing knowledge, skills, attitude and creative ability. It also helps in developing leadership qualities.

3.2.3 Importance of Curriculum Development

Curriculum development has a broad scope because it is not only about the school, the learners, and the teachers. It is also about the development of society in general.

In today's knowledge economy, curriculum development plays a vital role in improving a country's economy. It also provides answers or solutions to the world's pressing conditions and problems, such as threats to the environment, issues on politics, socio-economic problems, and other issues related to poverty, climate change, and sustainable development.

There must be a chain of the developmental process to develop a society. First, the school curriculum, particularly in higher education, must be designed to preserve its national identity and ensure its economy's growth and stability. Thus, the president of a country must have a clear vision for his people and the nation.

For instance, in the Philippines, if President Aquino wants the country to become the Asia-Pacific's tourism hub, then the school curriculum must be developed along that line. Curricular programs for higher education can be crafted in such a way that it will boost the tourism Industry in country.

Curriculum Design

For example, different models may arise, such as Edu-tourism, Ecotourism, cultural tourism, Medo-tourism, Biz-tourism, Techno-tourism, Agri-tourism, Archi-tourism, among others.

If universities have innovative curricular programs and demand in the local or global markets, many students, even from foreign countries, will enroll. A higher number of enrollees would mean income on the part of the universities. As a result, if the income is high, it can be used for teachers' promotion, scholarship, and remuneration. It can also be used to fund research and development endeavors and put up school facilities, libraries, and laboratories.

The country's economy can improve people's way of life through curriculum development. And to develop it, curriculum experts or specialists should work hand in hand with lawmakers such as senators and Congress members, the local government officials, governors, and mayors. Likewise, business communities and industries and other economically oriented players in society may be engaged in setting and implementing rules and educational reform policies.

Hence, curriculum development matters a lot in setting the direction of change in an organization, not only at the micro but also at macro levels. As long as curriculum development goals and objectives are apparent in the planner's mind, cutting-edge achievements in various concerns can be realized.

Conclusion:

Curriculum planning develops well-coordinated, quality teaching, learning and assessment programmes which build students' knowledge, skills and behaviors in the disciplines, as well as their interdisciplinary and or physical, personal and social capacities. A good curriculum planning in schools often requires overcoming many obstacles. The only certainty about curriculum implementation is that there is no one right way of going about it for all teachers in all schools. There are three levels of curriculum planning: the planning of policies, the planning of programs, and the planning of lessons.

It also includes the 'hidden curriculum' – what the children learn from the way they are treated and expected to behave. We want children to grow into positive, responsible people, who can work and cooperate with others while at the same time developing their knowledge and skills, in order to achieve their true potential. It is underpinned by the values that we hold dear at our school. The curriculum is the means by which the school achieves its objective of educating children in the knowledge, skills and understanding that they need in order to lead fulfilling lives.

3.3 PRINCIPLES FOR CURRICULUM DESIGN-CHALLENGE AND ENJOYMENT, BREADTH, PROGRESSION DEPTH, COHERENCE, RELEVANCE, PERSONALIZATION AND CHOICE

3.3.1 Principles of Curriculum Development:

Principles are the "WHY" aspect in curriculum development. WHY aspects shows the reasons for improvements in the curriculum – which includes individual, social, academic, vocational & national needs

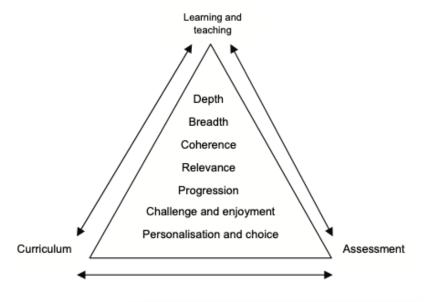
 It needs systematic and sequential planning to widen the sphere of the learning experience at each level by keeping in view the principles of integration and correlation.

The curriculum must include the sciences, languages and literacy, mathematics and numeracy, social studies, expressive arts, health and well-being, religious and moral education and technologies. All these elements must be part of every learner's broad general education from early years.

The principles must be taken into account for all children and young people. The principles will help teachers and schools in their practice and as a basis for reviewing, evaluating and improving the learning and teaching. Although all should apply at any one stage, the principles will have different emphases as a child or young person learns and develops.

The curriculum should be designed on the basis of the following principles:

- Challenge and enjoyment
- Breadth
- Progression
- Depth
- Coherence
- Relevance
- Personalisation and choice



Challenge and enjoyment......

3.3.2 Test Learner's Limits & Exciting to Learn

"At all stages, learners of all aptitudes and abilities should experience an appropriate level of challenge, to enable each individual to achieve his or her potential".

The practical nature of the challenges motivates all young people, including those who may not be as academically strong to show their abilities and to learn by offering new, interactive routes into familiar subject areas.

Each challenge should be cross curricular and the range of hard and soft skills involved must be designed to give young people more confidence in both an academic context and in their ability to make a positive contribution while working effectively with others.

Children and young people should find their learning challenging, engaging and motivating. The curriculum should encourage high aspirations and ambitions for all. They should be active in their learning and have opportunities to develop and demonstrate their creativity. There should be support to enable children and young people to sustain their efforts.

Breadth.....

3.3.3 Span of Knowledge

All children and young people should have the opportunities for a broad range of experiences. Their learning should be planned and organized so that they will learn and develop through a variety of contexts within both the classroom and other aspects of school life.

Breadth of learning refers to the full span of knowledge of a subject. Depth of learning refers to the extent to which specific topics are focused upon, amplified and explored.

Curriculum breadth vs depth

	BREADTH OF CURRICULUM	DEPTH OF CURRICULUM
Definition	The range of subjects taught across the whole curriculum, and the span of knowledge within each subject	How deeply specific topics within each subject are studied
Examples	A broad curriculum focuses on all curriculum subjects (for example art, PE, PSHE) not just core subjects (English, maths and science)	How deeply a pupil understands key concepts (e.g. can they explain the concepts in their own words or teach someone else?)
	A global history curriculum that spans a wide range of time periods and places An RE curriculum that covers many religions (beyond Christianity, Islam and Judaism)	How well pupils understand the underlying links between different subjects and ideas

Progression.....

3.3.4 Structure Like Building Blocks

Children and you people should experience continuous progression in their learning from 3 to 18 years. Each stage should build upon earlier knowledge and achievements. Children and young people should be able to progress at a rate which meets their individual needs and aptitudes.

Depth.....

3.3.5 Every Detailed Aspect of Learning Experience

There should be opportunities for children and young people to develop their full capacity for different types of thinking and learning, exploring and achieving more advanced levels of understanding.

Practitioners should support learners to engage with descriptions of learning in increasing depth and sophistication over a period of time. This should help learners to apply the descriptions of learning in increasingly challenging contexts and allow for diversion, reinforcement and reflection as their understanding and application of the key learning develops and becomes more sophisticated over time, provoking deep thinking, discussion and inquiry.

Coherence.....

3.3.6 Harmonize the Total Experience

Coherence is concerned with the total experience a student gets from the formal and informal curriculum and incorporates concepts including breadth, balance, relevance, engagement and individual growth. The curriculum is "IN HARMONY"

Curriculum Design

Children and young people's learning activities should combine to form a coherent experience. There should be clear links between different aspects of learning. Such links should be discussed with children and young people in order to bring different strands of learning together

Curriculum coherence can be viewed from a national, school and classroom level. Once a curriculum has been agreed at school and national level, teachers need to implement it in the classroom.

How do we ensure curriculum coherence?

The curriculum coherence is to align and reinforce the relationships between curriculum, endorsed textbooks, pedagogy and assessment. One way is to provide curriculum coherence in curriculum design by using the same learning objectives which are in the national curriculum frameworks, endorsed textbooks, schemes of work and, formative, summative assessments and assessment guidance (non-assessed subjects).

Relevance

3.3.7 Value of what they are Learning

Curriculum should be socially, culturally, personally relevant. It means the emphasis should be on WHAT IS BEING LEARNED and its relationship to the students' personal experiences. It should build a trust relationship between the students and educators thus creating an empowering environment and ample opportunities to learn with practice.

Children and young people should understand the purpose of their learning and related activities. They should see the value of what they are learning and its relevance to their lives, present and future.

Personalisation and choice

.....DOES IT CONFIRM TO THE LEARNER'S NEEDS?

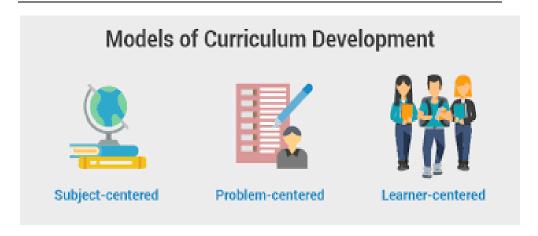
The logic of education systems should be reversed so that it is the system that conforms to the Learner, rather than the learner to the system. This is the essence of personalisation. Choice of Learning opportunities must be provided.

The learning planned for children and young people should respond to their individual needs and support particular aptitudes and talents. It should provide opportunities for exercising responsible <u>personal choice</u>. Once children and young people have achieved suitable levels of attainment across a wide range of areas of learning, the choice should become as open as possible.

We can conclude with the following

Curriculum & Enjoyment	Engaging in/out of the classroom, real-life, creativity, independence, appreciation of WOW effect
Breadth	Variety of contexts and experience,
Progression	Quality & planning, effective transition, building on earlier knowledge,
Depth	Individual opportunities for exploring, personal goals,
Personalisation & Choice	Wide scope at all levels, equality of choice, capitalize on strengths & needs
Coherence	Emphasis on connections, meaningful learning in different practical contexts
Relevance	Understanding of the present and the future, learn, practice and develop skills, attainment and achievement

3.4 TYPES OF CURRICULUM DESIGN: LEARNER CENTERED, PROBLEM CENTERED



3.4.1 Subject Centered Curriculum Design

INTRODUCTION

A model where the curriculum is divided into subject areas, and there is little flexibility for cross-curricular activity. Emphasis is placed on acquisition, memorization, and knowledge of each specific content area. Within this curriculum structure, strong emphasis is placed on instruction, teacher-to-student explanation, and direct strategies. Direct strategies include lectures, questions, and answers, as well as teacher-student discussions. These curricula often encourage memorization and repetitive

Curriculum Design

practice of facts and ideas. Traditionally, students had little choice about what they studied under these curricula. Now students are given some degree of freedom in choosing elective subjects. They are also given more independence to choose from among key topics for personal project work.

Curricula organized around a given subject area (for example, World War II) will look at the facts, ideas, and skills of that subject area. Learning activities are then planned around acquisition and memorization of these facts, ideas, and skills. Teaching methods usually include oral discussions and explanations, lectures, and questions.

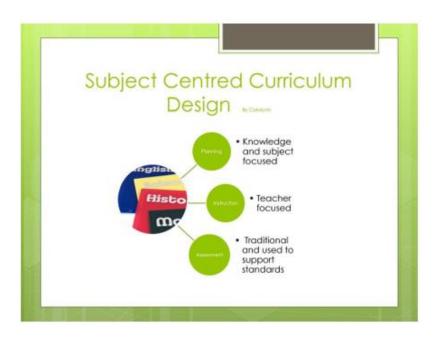
An example of a subject-centered curriculum is the spiral curriculum. The spiral curriculum is organized around the material to be taught, with less emphasis on the discipline structure itself, and more emphasis on the concepts and ideas. It is based around the structure of knowledge, rather than focusing on the detailed information itself.

A spiral curriculum takes emphasis away from learning specific topics or pieces of information within a certain time limit. Instead, it aims to expose students to a wide variety of ideas over and over again. A spiral curriculum, by moving in a circular pattern from topic to topic, aims to catch students when they first become ready to comprehend a concept. At the same time, a spiral curriculum works to continuously reinforce the fundamentals of this concept, to ingrain these fundamentals in the students' knowledge base, and to prevent losing students who aren't ready for the new lesson.

With this technique, students repeat working on the same skill, but concepts gradually increase in difficulty. This is referred to as spiraling. What it means in practice is that each of the core topics of a particular subject is emphasized throughout the school year and repeated in all of the higher years, but with added complexities. Instead of covering the skill of "division" in the first semester of a math class, for example, simple division may be seen in the first semester, and again in the second semester, but with added double figures.

3.4.2 AIM OF SUBJECT CENTERED CURRICULUM DESIGN

The central objective for any subject-centered approach to curriculum is student mastery of content knowledge. The teacher presents content and skills to students in a logical sequence. This step-by-step approach ensures that students gain all the information and skills needed to master this content area.



3.4.3 Characteristics of Subject Centered Curriculum

Learning subject matter is an end in itself

Listening to lectures, studying the textbooks and studying for examinations are all practices that show the influence of the subject centered curriculum approach. The subject teacher considers it of great importance to cover the prescribed textbook. Since a specific amount of subject matter is to be learnt in a set time. If subject matter has been learnt, the teacher and students feel satisfaction.

There is a predetermined uniform standard of knowledge

Those who follow the subject centered approach strongly advocate minimum standards. They advocate set standard for a class to be achieved by all students in order to qualify the examination. In other words a time limit is placed on achievements and if the pupil fails, the course must be repeated. The teacher attempts to bring the pupil up to the set standard. Thus failures are required to repeat a grade or they are dropped out from their institutions.

Practice in skills is emphasized

Drill in specific skills is one of the typical characteristics of the subject curriculum. Drill sessions, remedial work, review work, coaching classes are often devoted to such types of drill. This drill is given in equal amounts to all pupils in the group.

Emphasis is placed upon acquiring information for future use

The subject matter selected for a course, is considered to be of value in adult living rather than child's immediate needs. Thus adult problems are given more weight than problems of children in youth.

As the subject matter is an important thing to be learnt, learning is measured by how well the subject matter has been mastered. Frequent tests are given to check the extent of achievement by the students.

3.4.4 Drawbacks of Subject Centered Curriculum Design

1. Separation of the Subjects

Subject-centered curriculum prevents students from understanding the wider context of what they're learning. In the traditional method of learning, students learn math in one period, reading in another, science in another and social studies in yet another, separate class. Every subject is taught as though it exists in and of itself without regard for how one subject impacts another subject. Teachers provide math worksheets, which the students work to complete. Math problems are devoid of real-world applications. The same goes for other subjects studied. Students may learn the history of Native Americans but not how history both past and current impacts this segment of the American populace in relation to their culture, American culture and the world at large.

2. Lack of Integration

Life isn't a series of separate events. How someone makes a decision depends upon many factors including age, location, political climate and view and even how much sleep you had the night before. No person is an island but is influenced by who that person is and the environment around him. A traditional subject-centered curriculum so focuses on each subject in an individual context, students don't understand how one subject impacts another subject or how each works together. Learning is fragmented into little boxes instead of flowing together toward deeper comprehension of subject matter as a whole. Students are not taught to use different aspects of their knowledge in an integrated fashion.

3. Passive Learning

In the traditional or subject-centered curriculum, students are discouraged from entertaining a different point of view than what textbook or teacher presents. The subject matter has already been chosen by experts in the different subjects, by school boards and by teachers and deemed of value for students to learn. The subject matter is of critical importance, while students become little more than receptacles to be filled, rather than thinking, rational individuals who need to be part of the learning process. The subject-centered curriculum fosters not excitement about learning and knowledge, but passivity.

4. System of Authority

The traditional subject-centered curriculum depends upon a system of authority. Students are not part of the authority hierarchy. Their needs are considered only in conjunction with type and difficulty level of the material. Subject-centered learning does not offer a wide range of options that take into account ethic background, family situations that impact learning or different learning styles of students. Material is covered and does not change regardless of the needs of individual students or classes. The material must be taught and students are expected to absorb the material in the time allotted. Testing, then, is often based solely on regurgitating material and not on overall comprehension or the practical use of the material in everyday life to solve problems.

3.4.5 Learner Centered Curriculum Design

INTRODUCTION

Learner-centered curriculum design takes each individual's needs, interests, and goals into consideration. In other words, it acknowledges that students are not uniform and adjust to those student needs. Learner-centered curriculum design is meant to empower learners and allow them to shape their education through choices.

Instructional plans in a learner-centered curriculum are differentiated, giving students the opportunity to choose assignments, learning experiences or activities. This can motivate students and help them stay engaged in the material that they are learning.

We can classify and recognize student-centered learning by our students' increased opportunity to decide two things: what material they learn and how they learn it. (Some educators refer to this same basic idea as personalized learning.) This learning approach differs from traditional classroom instruction, known as teacher-centered learning, because student-centered learning puts a firm focus on student decision-making as a guiding force in the learning process.

The shift toward increased student decision-making can take a variety of forms. However, all SCL programs tend to share some features in common. For example, they emphasize making the educational process more meaningful to today's students. SCL programs also emphasize using rigorous assessments to gauge student performance by including both teachers and students in the assessment process.

Student-centered learning allows greater flexibility to work in small groups or learn remotely. And the flexibility that comes with SCL is increasingly important as schools adapt to the corona virus pandemic and its shift toward remote learning.

Today, educators need to find ways to apply student-centered learning virtually. While creating remote learning experiences can be a daunting

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task, we know that remote classes can be designed to incorporate student-centered learning in effective ways.

Teachers play an essential role in the education process. Dedicated educators do everything in their power to foster positive outcomes for their students. Student-centered learning does not side line or diminish the role of teachers. Instead, it seeks to use teachers' expertise in different ways to increase student engagement.

3.4.6 How to Create Learner Centered Classes?

- 1. Giving students introductory autonomous assignments and helping them set their goals for those assignments
- 2. Helping students become acquainted with their preferred ways of learning new material
- 3. Becoming more responsive to students' areas of interest and passion
- 4. Gradually increasing the number of control students have to set their assignments and learning agendas
- 5. Having teachers shift from a leading role to a facilitating and resource role for student-selected activities gradually
- 6. Creating a physical (or virtual) class layout that makes it easy for students to collaborate
- 7. Asking students to start gauging their learning accomplishments rather than relying solely on the results of standardized tests

3.4.7 Program Design Support

To facilitate the process of designing a learner-centered curriculum we use the Program (Re)Design Model below (Fowler, et al., 2016). This faculty-led process brings together pedagogical experts and disciplinary experts as well as educational technology experts to create a data-informed curriculum that places student learning at the center. Programs designed using this comprehensive model are well-positioned for the accreditation process.



1. Form and Orient team

- Constitute the development team (instructional support experts, i.e., instructional designer, instructional technologist, student academic support professional, media expert, assessment expert, librarian) that will support faculty and other subject matter experts
- Develop timeline

2. Gather data

Data sources offering evidence

- a. **Internal:** student surveys; instructor surveys; focus groups; define perspective of discipline
- b. **External:** review of peer institutions; alumni feedback; employer focus groups and surveys; job descriptions; accreditation/certification requirements
- Identify target audience
- Determine program/course type: credit/non-credit, certificate, micro-master, master, stackable courses

3. Create Program Learning outcomes

Program Goals are broad statements identifying learning parameters, content and relationships between content areas – what students should learn, understand, or appreciate as a result of their studies by the time they finish a program or a major.

Student Learning Outcomes (SOL) describes in concrete terms what program goals mean. SLO statements identify what students will be able to demonstrate, produce or represent as a result of what and how they have learned in a program. Unlike program goals, SLO's are not fixed. Assessment results will then be used to make required changes in the curriculum, pedagogies, faculty professional development, student support, or resource allocation. Learning outcomes too could be revised, modified or changed for a subsequent assessment cycle, etc.

4. Create competency rubrics

Competency Rubric: Once program learning outcomes (PLOs) have been created, the next step will be to create rubrics that outline the performance criteria for each outcome. Rubrics define a student's developmental progression for each outcome throughout the degree program. They also serve as a means to evaluate student products at the overarching program level.

5. Create Curriculum Map

Curriculum mapping identifies where the program learning outcomes are introduced (I), reinforced (R), strengthened (S) and/or demonstrated (D). Courses are listed across the top of the map and outcomes along the side. The center of the map is completed by determining which courses/experiences will support the I, R, S, and/or D of each program learning outcome.

6. Create Curriculum Materials

- a. Identify teaching modalities best suited for fulfilling the identified learning goals
- b. Identify and develop specific teaching strategies (incl. instructional technology tools, media tools, etc.) best suited for student learning and engagement
- c. Develop an assessment plan that answers these three questions:
 - i. Which student learning outcomes will you assess?
 - ii. What evidence will you collect to determine learning effectiveness and gaps?
 - iii. How will you use the information to improve your program?

7. Implement and Assess

Collect learning data (including learning analytics) for formative assessment

Adjust and fine-tune based on assessment feedback

8. Refine

Ongoing assessment will ensure that curriculum decisions are implemented effectively.

3.4.8 Characteristics of Learner Centered Curriculum

1. Learner-centered teaching engages students in the hard, messy work of learning.

On any given day, in most classes teachers are working much harder than students.

2. Learner-centered teaching includes explicit skill instruction.

Learner-centered teachers teach students how to think, solve problems, evaluate evidence, analyze arguments, generate hypotheses—all those learning skills essential to mastering material in the discipline.

3. Learner-centered teaching encourages students to reflect on what they are learning and how they are learning it.

They challenge student assumptions about learning and encourage them to accept responsibility for decisions they make about learning; like how they study for exams, when they do assigned reading, whether they revise their writing or check their answers.

4. Learner-centered teaching motivates students by giving them some control over learning processes.

Learner-centered teachers search out ethically responsible ways to share power with students.

5. Learner-centered teaching encourages collaboration.

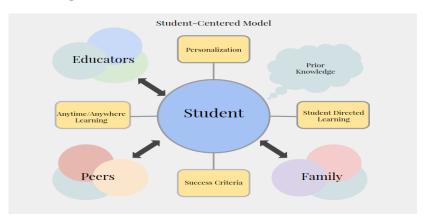
Learner-centered teachers work to develop structures that promote shared commitments to learning.

Curriculum and its importance in learner centered approach

The curriculum provides a lot of help and assistance to the learners.

- The curriculum gives students a written detail about the types of learning experiences they need to acquire for completing the expected learning objectives.
- The curriculum makes them familiar with the learning objectives. This way it makes the tasks of learning purposeful and goal oriented. This purposefulness makes them motivated towards learning as they are aware of the types of behavioral changes expected as learning outcome from the study of a particular subject or doing a certain activity to complement learning.
- A properly developed curriculum is accompanied by the resource materials needed to supplement it. These resources include suggested experiments, learning activities, projects, assignments, references etc. These materials are equally important for both teachers and learners.
- A curriculum is a properly developed framework of the teachinglearning process. It includes learning objectives that should be known to the learners. When learners are aware of the learning objectives they can plan, execute and evaluate them for the realization of the learning outcome of the course being studied.
- Hence a properly developed curriculum can help the learner in their learning process from beginning to end for the realization of the set learning objectives.
- Realization of these learning objectives results in overall growth and development in all the aspects and dimensions of their personality.

3.4.9 Advantages of Learner Centered Curriculum



- A fully learner centered curriculum would try to adopt an array of learner centered learning methods.
- Teaching would revolve around the students being heavily engaged in the lessons.
- There would be greater evidence of student student interactions, not just informally, but also in terms of getting the students to work together on projects, discovery learning activities and structured group work.
- Students will also develop negotiation skills through having the opportunity for the students to negotiate discussing course content, and agree on the types of assessment strategies to use. This might be set out as a 'content curriculum buffet' from which the student can choose topics. This would, obviously, be dependent on any external sanctions or constraints set by examining bodies or the need to meet Nationally set criteria.
- Students develop learning and other skills and gain meaningful knowledge that will help them throughout life.
- It can help to build social skills and self-esteem. They also gain more emotional and cognitive support from their peers.
- The relationship between rights and responsibilities is learned.
- Students discover that learning is interesting and fun.
- Students are more attentive and willing to participate in the class.
- Complaints about irrelevance and unfairness decrease.
- The pupil has more of an active role to play in their learning and students can adapt the way they learn, to make their studies more effective.
- The ideal situation for this type of group work is that weaker students should be placed with more able students to act as scaffolding.
- Students work on projects or problems in teams with both personal and team accountability for conceptual understanding.

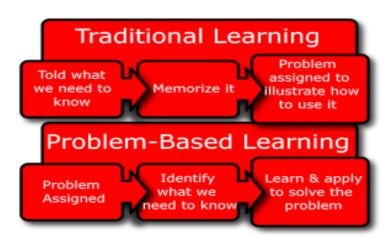
- Students work together in achieving goals by upholding the norms of the group.
- Students are actively helping and motivating spirit to succeed together.
- Active role as peer tutors to further enhance the group's success.

3.4.10 Disadvantages of Learner Centered Curriculum:

- 1. It requires a longer time for students so it is difficult to achieve curriculum targets.
- 2. It takes a long time for teachers so that teachers in general do not want to use cooperative learning.
- 3. It requires special skills of teachers so that not all teachers can do or use cooperative learning.
- 4. Specific nature of student demands, such as nature likes to work together.

3.4.11 Problem Centered Curriculum Design

According to Savery (2006), the problem centered curriculum design is a curriculum design which "empowers learners to conduct research, integrate theory and practice, and apply knowledge and skills to develop a viable solution to a defined problem." Learners are seen as engaged and self-directed problem solvers while teachers are placed as facilitators. Under this curriculum, learning is seen as an active, integrated, and constructive process influenced by social and contextual factors. Learners are placed in social settings with their learning organized around issues of genuine life problems. This curriculum design is essentially under the learner-centered approach and comes under the theoretical influence of Progressivism whereby students learn best by doing real-life activities in the present community and when working with others.



One of the key characteristics of the problem centered curriculum (PCC) is that it uses ill-structured problems to allow free inquiry. Students are

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presented with a problem that requires more information for understanding than is initially available. The problem is complex, open-ended and intriguing enough to lead students towards inquiry and higher order thinking skills. Secondly, collaboration is essential in the PCC where each student is given the responsibility to seek relevant information and inform the group to develop a viable solution. Through collaboration, students get to develop new ideas, raise questions and consolidate each others' understanding by interacting. Thirdly, the PCC uses contents that are authentic and multidisciplinary. Learners are presented with problems which relate to their environment while also requiring the application of information integrated from diverse fields. This indirectly brings the need for ICT into the equation as information from diverse disciplines, fields and sources can only be efficiently accessed through the Internet.

The advantage of the PCC is that it develops higher order thinking skills in students. This is because a whole range of thinking skills is involved in finding, evaluating, and using appropriate learning resources in order to analyze and solve complex problems. Furthermore, the PCC equips learners with the skills necessary to be part of the real-world workforce. Skills related to effective communication, cooperation and collaboration are essential in all workplaces. On the other hand, the disadvantage of the PCC is that it is difficult to construct truly authentic problems. The simulation of real-life contexts for learning often requires well-developed resources that are both expensive and time-consuming. In addition, it would be a challenging task for teachers to monitor each student's work processes and outputs within their collaborative groups. This brings in the need for multiple assessment methods like self-evaluation, peer assessment and portfolio assessments which can be tedious.

3.4.12 Advantages of Problem Centered Curriculum (Pcc)

1. PCC develops higher order thinking skills

According to UNESCO (2005) knowledge societies are not limited to information societies in that information is a commodity but knowledge is of individuals capable of practicing the cognitive skills needed to interact with and use knowledge purposefully. This is where the role of PCC comes in. As stated earlier, the PCC puts forth ill-structured problems which are complex and open-ended, leading students towards higher order thinking skills. In seeking to identify the root problem and the conditions needed for a good solution, students are required to master the available information with critical judgment and think to analyze, sort and incorporate them for a purpose. This process of learning develops higher order thinking skills like analyzing, evaluating and creating which are the creative and critical thinking skills in demand in a knowledge society. right to any reasonable mind." Hence, the demand of a knowledge society is for broader societal learning necessary for development." This means that knowledge society emphasizes not only technical knowledge but also practical knowledge.

2. PCC develops technical and practical knowledge

According to Butcher (2011) education in the knowledge society is "not limited to formal education in traditional structures, but also encompasses the practical knowledge involving context-based information. The PCC develops both in students through the use of authentic and multi-dimensional learning.

For example, for teaching basic operations like addition and subtraction in Mathematics, students are given a problem where they have a list of things to buy but with insufficient money to buy all of it. Students will analyze the problem by considering the list of things to buy and evaluate each item as 'needs' and 'wants'. Students will then come up with a budget to optimize the use of money for their expenditure. Students can also be required to make the purchase, either a real one or a simulated one, of items which they deem necessary. Finally, students present their budget plan to the class and explain the analysis and judgment behind the plan.

3. PCC promotes collaboration

According to UNESCO (2005) a knowledge society should be able to provide for this need of integration. Firstly, it is because a knowledge society encompasses a much broader social and ethical dimension to take sufficient account of cultural and linguistic diversity for people to feel at home in a changing world. Secondly, it is because a knowledge society fosters knowledge sharing to work towards connecting the forms of knowledge that societies already possess; thus nobody should be excluded from the public good which is knowledge.

PCC meets the knowledge society's demand for socio-cultural integration by promoting collaboration through group work. As mentioned earlier, group work is a crucial part of PCC to hold students accountable for their contribution in a group and to form productive learning communities.

This does two things to meet the two purposes of the knowledge society's demand concerning integration. Firstly, the PCC develops students' interpersonal domain through group work like enhancing students' communication skills, soft skills, empathy and acceptance towards socio-cultural diversity. As students share information and discuss viable solutions, they have to communicate effectively, learn to listen to their members' opinion, tolerate and respect differences and manage disagreements. Hence, individuals who are more equipped to embrace and work alongside a multicultural society are produced for the benefit of the knowledge society. Secondly, PCC requires students to assume the responsibility of collecting relevant information, sharing collected information with one another, and synthesizing the information through discussion to come up with a

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feasible solution. As it is, this whole process is already a replica of the knowledge-sharing culture in the knowledge society. As students practice working together for a common purpose, they will do the same in their future workplace for the knowledge society.

4. PCC produces lifelong learners

According to UNESCO (2005) a knowledge society regards lifelong learning as a requirement to keep up with constantly changing global job markets and technologies. The ongoing, voluntary and self-motivated pursuit of integrating new experiences and adapting to new situations. Preparation for life-long learning involves the learning of general skills and competencies as well as skills needed to learn other subjects. This is where PCC is useful as it develops learners who are self-directed and meta-cognitively aware.

The PCC develops students into self-directed learners by giving students responsibilities over their own learning (Knowlton, 2003). This is because students engage with the problem with whatever their current knowledge and experience affords. If they feel that more knowledge is required to solve the problem, it is their own realization which drives them to seek relevant resources for more information since responsibility for the solution and the problemsolving process rests with the learner. As students' ownership over learning increases, they become independent and autonomous learners capable of gaining knowledge through personal and intellectual skills developed through PCC. When students grow into adults, there will no longer be teachers to guide their learning or deliver knowledge to them. Even then as working adults and eventually retiring adults, they will be able to continually learn to improve and sustain their skills, knowledge and attitudes across the lifespan. This is extremely relevant to the demand of the knowledge society for lifelong learners.

In addition, the PCC develops students who are meta-cognitively aware. Through PCC, students are required to be conscious of what information they al-ready know about the problem, what information they need to know to solve the problem, and strategies to use for solving the problem. On top of that, students are also given the opportunity to gain insights into their own approach to solving problems. This is because students will be led to assess the strengths of previously used approach as they come across more and more problems. If the previously used strategy did not help to successfully solve the problem, they would recall that and attempt changes for the next problem and future ones. This meta-cognition plays a strong role in lifelong learners because it develops aware-ness and understanding of their own thought processes, enabling them to direct and improve their learning. Thus, this also meets the demand of the knowledge society for lifelong learners.

5. PCC leads learners towards innovation

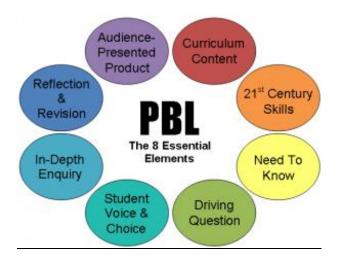
According to Butcher (2011), innovation is the third pillar of knowledge in society as it is a means of support for development and economic functioning. Innovation is described as "a process of creation, evolution, and application of knowledge to produce new goods and services." Innovative skills are a demand of the knowledge society because the adapting, adopting, and using of knowledge to produce improved products and services are essential for both technological advancement and meeting the needs of the knowledge society.

The PCC meets this demand because the problem-solving approach leads learners towards innovation. As mentioned earlier, ill-structured problems are used to trigger students' curiosity and thinking processes. These ill-structured problems are designed in such a way that they have multiple solution paths. With no one-way solutions, students are trained to think outside the box, giving much room for their own creativity. The multiple solution paths also reduce rigid structures which confine their problem-solving process. Through much practice in adapting, adopting and using knowledge to be integrated for a new purpose.

Furthermore, the PCC also develops ICT competencies among students. It is undeniable that use of the Internet and electronic devices is important to collect information from diverse disciplines, fields and sources for productive problem-solving. Hence, PCC allows students the exposure, practice and skills to use ICT to access information. ICT competency is a critical tool in preparing and educating students with the required skills for the global workplace.

With such exposure to educate students to adapt to a work world of continuous technological innovations, PCC indirectly uses ICT to develop students who can use the progress of knowledge and technological innovation to produce more knowledge and innovations in the long term.

EIGHT ESSENTIAL ELEMENTS OF PBL



3.4.13 Disadvantages of Problem Centered Curriculum

For Students

- Prior learning experiences do not prepare students well for PBC.
- PBC requires more time and takes away study time from other subjects.
- It creates some anxiety because learning is messier.
- Sometimes group dynamics issues compromise PBC effectiveness.
- Less content knowledge may be learned.

For Instructors

- Creating suitable problem scenarios is difficult.
- It requires more prep time.
- Students have queries about the process.
- Group dynamics issues may require faculty intervention.
- It raises new questions about what to assess and how.

For Institutions

- It requires a change in educational philosophy for faculty who mostly lecture.
- Faculty will need staff development and support.
- It generally takes more instructors.
- It works best with flexible classroom space.
- It engenders resistance from faculty who question its efficacy.

Conclusion

1. Subject-Centered

This model emphasizes the specific skills and knowledge associated with a subject area. Most kinds of widely standardized curriculum fall under the subject-centered approach. It's the most common approach used throughout K-12 schools in the U.S, but it's also found throughout college classrooms, especially in large 1000-level lecture classes.

When you hear the term "core curriculum," it's referring to a subjectcentered approach. While this model intends to create equal learning experience across different schools and classes, it doesn't always work out that way in practice.

Because this approach is not student-centered, it can lead to a lack of engagement and potentially lower performance. Additionally, this approach leaves little room for cross-subject connections.

Example: If you're teaching an introductory European history course, a subject-centered curriculum may include covering the details and key players of major wars.

2. Problem-Centered

This approach aims to provide students with relevant real-world skills. Learners are taught how to look at a problem and come to a solution. Some benefits of this approach are an increased emphasis on critical thinking, a focus on collaboration, and more innovation in the classroom. Students still learn key skills and knowledge, but with additional context.

Example: A problem-centered approach to teaching a public relations course might involve tasking a group of students with assessing a real business's PR strategy and developing an actionable campaign.

3. Learner-Centered

Learner-centered design emphasizes the needs and goals of each learner as an individual. With this approach, you'll analyze the pre-existing knowledge and learning styles of your students. The needs of your learners will guide your curriculum development process.

Generally, this type of curriculum development aligns most closely with a process-focused curriculum.

Example: One way to incorporate learner-centered design into your curriculum is by inviting students to fill out a pre-course survey to see what they already know about your subject and what areas they are most interested in learning. This can be especially beneficial for upper-level courses—hopefully, students are coming in with a solid foundation of knowledge, but a learner-centered approach uses data rather than assumptions to determine curricular goals.

3.5 LET US SUM UP

Curriculum Designing Ensures:

- * To differentiate among three levels at which curriculum planning occurs in schools: policy, programs and lessons.
- * To reflect on the backgrounds, priorities, and skills ordinarily brought to curriculum planning by key stakeholders, especially teachers, principals, parents, students and external facilitators.
- * To become familiar with the major problems involved in curriculum implementation.

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- * To understand the implications of the ideas of fidelity of curriculum implementation and adaptation in curriculum implementation.
- * To ensure a shared vision.

Curriculum & Enjoyment: Engaging in/out of the classroom, real-life, creativity, independence, appreciation of WOW effect

Breadth: Variety of contexts and experience

Progress: Quality Planning, effective transition, building on earlier knowledge

Depth: Individual opportunities for exploring, personal goals

Personalisation & Choice: Wide scope at all levels, Equality of choice

Coherence: Emphasis on connections, meaningful learning in different practical contexts

Relevance: Understanding of the present and the future, learn, practice and develop skills, attainment and achievement.

3.6 UNIT END EXERCISES

- 1) Describe need and significance of curriculum design
- 2) Discuss principles of curriculum development
- 3) Explain Subject Centered Curriculum design.
- 4) What are the characteristics of Subject Centered Curriculum
- 5) Explain learner centered curriculum design
- 6) "We can create learner centered classes." Discuss

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THEORIES AND CURRICULUM DEVELOPMENT

Unit Structure

- 4.0 Objectives
- 4.1 Introduction
- 4.2 An Overview
 - 4.2.1 Concept of Curriculum development
 - 4.2.2 Principles of Curriculum development
- 4.3 Process of Curriculum development
- 4.4 Theories of Curriculum development
- 4.5. A. Curriculum and Constructivism
- 4.6. Concept of Constructivist curriculum development
- 4.7 Curriculum and Critical Theory
- 4.8. Curriculum and Poststructuralist theory
- 4.9. Let Us Sum Up
- 4.10 Unit End Exercise
- 4.11 References

4.0 OBJECTIVE

To enable the student to:

- 1. Understand the concept of Curriculum development
- 2. Understand the Principles of Curriculum development-
- 3. Get acquainted with the Process of Curriculum development
- 4. Know the Theories of Curriculum development
- 5. Understand the relation of Curriculum and Constructivism
- 6. Understand the Concept of Constructivist curriculum development
- 7. Understand the concept of Curriculum and Critical Theory
- 8. Understand the concept of Curriculum and Poststructuralist theory

4.1. INTRODUCTION

Curriculum theory is the theory of the development and enactment of Curriculum. This is the process of designing a course of study according to a set of requirements. It involves major tasks like finding or assessing learner's needs characteristics to the said objectives and aims; planned teaching learning experiences which will help to achieve the decided aims and objectives. The process of developing the curriculum is unique to each national setting, which involves the complex outcomes of the opinion and solutions of key stakeholders of education and all together from the society. Curriculum development involves historical analysis of Curriculum and a way of viewing current educational curriculum and policy decisions.

Curriculum theory may be regarded as a body of beliefs, assumptions, and knowledge derived through a process of critical analysis and substantiated by study and observation. The subject centered approach emphasizes subject matter and the memorization of facts and might be called the traditional approach. The interest curriculum approach places emphasis on the learner, often to the neglect of content. The structure-of-knowledge approach focuses on understanding, development of perceptual skills, and symbolic operations which lead to an extension of learning and knowledge.

Curriculum is being designed and implemented; consideration must be given to how these two content areas may be closely integrated rather than segregated from each other.

Importance of curriculum theory

- a. Describes, predicts, and explains curriculum issues in the operational ways
- b. Synchronizes relations among curriculum issues in the curriculum development
- c. Suggests new curriculum issues for trying out
- d. Discover new and more powerful generalization in curriculum planning
- e. Logical deduce specific and testable hypotheses for research in curriculum issues
- f. Classifies existing and new knowledge
- g. Develops and use curriculum models
- h. Sort out and characterize events of curriculum

4.2 AN OVERVIEW

Curriculum theory is one of the more contested areas in curriculum inquiry. Slattery (2006) recently wrote that "curriculum theory has many hostile and competitive factions at odds with one another" (p. 193). Unlike the case in the physical sciences, for example, where competing theories such as the wave and particle theories of light are debated in terms of their power relative to observable phenomena, disagreements over appropriate curriculum theories tend to relate to ideological positions and to be settled politically as followers of one or the other ideology gain credence. Westbury (2007) traces developments in what might be called the politics of curriculum inquiry for the United States and Europe. Freire, P.(1970)

Curriculum theory has four dimensions: goals or objectives, content or subject matter, methods or processes, and evaluation or assessment.

The first dimension is concerned with the rationale for including certain subjects in the curriculum while eliminating others. Justifications for curricular inclusion can be roughly classified into four types: logical delineations between domains of knowledge, unique mental or cognitive

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operations, cross-cultural social distinctions, and deliberative activity regarding the ideal society.

The second dimension is content or subject matter, which refers to the knowledge, skills, or dispositions inherent in the selection of things and their arrangement. The degree of integration between distinct items of information and advancement within the domain itself are the two most essential sorts of interactions between them. Curriculum theorists have also focused on how those goals and objectives are communicated. Three models have been developed: and Curriculum as a product, curriculum as a process, and curriculum as content are all examples of curriculum.

The third dimension is methods or processes, which belong to pedagogy and are governed by the first two dimensions. The mode of curriculum delivery is characterized as pedagogy. Several techniques have been developed. Imitations, didacticism, inter subjective interaction, and apprenticeship are examples of these. The two most influential learning theories, symbol-processing and contextual methods, assign different roles to learning styles, assessment, and meta-cognition.

The fourth factor is assessment or evaluation, which refers to the process of assessing if the curriculum has been successfully applied.

4.2.1. Concept of Curriculum Development-

'Curriculum' the word is found in Scotland as early as 1820. The term curriculum is derived from the Latin word `Currere which means 'to run'. Curriculum is meant to run the course; curriculum is the backbone of education that provides the pathway to reach the ultimate aims and objectives of education which help to build the nation in a uniform progressive way.

Curriculum development focuses primarily on content and areas related to it. It encompasses the macro or broadly based activities that impact on a wide range of programs, courses, and student experiences.

Although each area focuses on a number of rather unique concerns, many aspects of development could be classed as either curriculum or instruction.

Curriculum development may lean more towards the theoretical issues and problems and towards planning and design, as this one does, or towards the achievements, problems, puzzles and issues in practice, as does the companion volume Readings in School-Based Curriculum Development (Skilbeck 1984a). Each, however, will have to call in some degree on the other, with the proviso that in talking about curriculum development in any form we must give our main attention to plans, designs and ideas for action: our theory is a theory of action and its tests must go beyond the canons of discourse, evidence and logical argument to the arenas of teaching and learning and the test of experience in class.

Definition of Curriculum:-

1. According to B. Rudyand and H. Henry -

"Curriculum in its broadest sense, includes the complete school environment, involving all the courses, activities, reading have been provided here to understand the nature and characteristics of curriculum."

2. According to Froebel -

"Curriculum should be conceived as an epitome of the rounded whole of the knowledge and experience of the human race."

Curriculum development in its word meaning stands for the development of the curriculum.

Need And Importance of Curriculum Development:

- Curriculum development is a purposeful activity.
- It is undertaken to design or redesign for the realization of certain specific educational objectives.
- The curriculum is the heart of the student's college/school experience.
- The curriculum should be reviewed and revised on a regular basis so that it is able to serve the changing needs of both students and society.
- The following points iterate the needs and importance of curriculum development.

4.2.2. Principles of Curriculum Development

There are some vital principles of Curriculum development which are as follows:

- 1. Principle of Pupil Centered Education
- 2. Principle of Activity Based Education
- 3. Principle of Interlink and Relation with Life
- 4. Principle of Implementation of Innovativeness and Constructive Power
- 5. Principle of Integrated Experiences
- 6. Principle of Efficacy
- 7. Principle of Future Goal
- 8. Principle of Freedom and Integration

4.3 PROCESS OF CURRICULUM DEVELOPMENT

Curriculum is the most important factor and also the backbone of education. It is an inevitable part of learning institution. Curriculum directs to complete learning experiences of Pupil which is not only

Theories and Curriculum Development

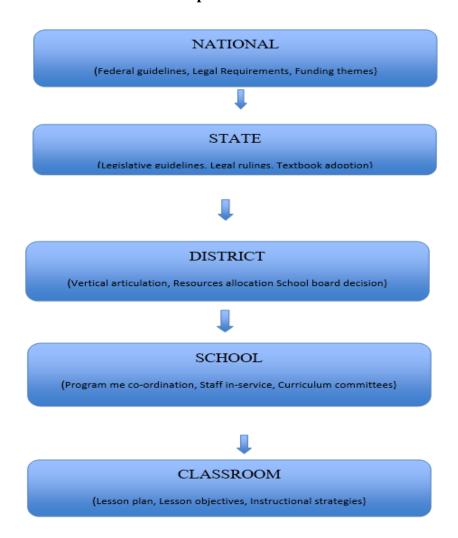
informal education but also in informal and non formal education. It is planned and purposeful journey of students' behavior in a positive or constructive way. According to the needs of society the curriculum shifted or went to several changes as per the needs of society.

Curriculum development has broad scope as it covers all the stakeholders of education and society as well. As per the change in future education and progress of world, curriculum plays an important role in bringing all the desired aims and objectives to be achieved.

The term curriculum is normally used to refer in broad sense to what is learnt in a particular course or programme. It covers both planned and intended learning and learning that is a planned and incidental.

First, there are generally two types of curriculum models: the product model and the process model. The model you choose to follow will influence the steps you'll take to develop the course.

Process of Curriculum Development



4.1. Process of curriculum development-1 (Based on the book by Wiles and Bondi pg.17)

4.4 THEORIES OF CURRICULUM DEVELOPMENT

If we see the history of curriculum development we can witness the drastic changes that have occurred in the construction of Curriculum in the last few years or a decade. Curriculum development is the process of designing a course of study according to a set of requirements.

Curriculum theory and practice also need to be integrated with effective professional development, theories of Curriculum, effective teaching, and assessment that are developed hand in hand with their applications and practice.

There are many different views of Curriculum areas including those of Herbert Kilelbard and Michael Stephen's Kyon Ro. Among other ones, the most common criticism of the broad field curriculum is that it gives more emphasis on mental discipline and education. John Dewey's curriculum theory asserts that the curriculum should ultimately produce students who would be able to deal effectively with the modern world and therefore curriculum should not be presented as finished abstractions but should indicate and include the child's preconception and should incorporate how the child loves his or her own word. John Dewey has given much importance to the four instincts which shape children's behavior that are social, constructive, expressive and artistic sense. So according to John Dewey, curriculum should be built in an orderly sense of the world where the child lives. To accomplish this John Dewey has made connections between subjects and the life of a child.

4.5. CURRICULUM AND CONSTRUCTIVISM

Constructivism is 'an approach to learning that holds that people actively construct or make their own knowledge and that reality is determined by the experiences of the learner' (Elliott et al., 2000, p. 256).

Knowledge is constructed rather than innate or passively absorbed. Constructivists believed that human learning is constructed, that learners build new knowledge upon the foundation of previous learning.

According to Brooks (1987), different kinds of constructivism, such as radical, cognitive, situated, social, cultural, socio-cultural and critical, are encountered in literature. The most common of these are cognitive, radical and social constructivism. Cognitive constructivism is based on the work of Swiss developmental psychologist Jean Piaget. Piaget's theory has two major parts: an "ages and stages" component that predicts what children can and cannot understand at different ages, and a theory of development that describes how children develop cognitive abilities.

Social constructivism is related to Vygotsky's ideas and is based on the idea that all knowledge is constructed socially, and is in the social-centered group of constructivism.

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As a matter of fact, Piaget (1955) tries to examine the process of acquiring knowledge. Glasersfeld (1995) examines the relation between knowledge and reality (radical constructivism), and puts more emphasis on individual elements in the process of constructing the knowledge. On the other hand, both Piaget (1955) and Glasersfeld (1995) explain the learning process by means of individual experiences in daily life, and what is understood from those experiences. Thus two kinds are in the individual centered group of constructivism.

4.6 CONCEPT OF CONSTRUCTIVIST CURRICULUM DEVELOPMENT:

The curriculum is the heart of education, the sharing of learning experiences between the teacher and learner. All else in the system should be derived from this: how learners should be assessed, how teachers should be trained and developed, what textbooks and other learning support materials should be liked, how schools and the educational system should be organized and managed, and the allocation of resources necessary for the system to function. According to Jonassen (1991), there are three major phases of curriculum development of analysis, design, and evaluation.

Constructivist Curriculum

A constructively oriented curriculum presents an emerging agenda based on what pupil already knows, what they are puzzled by, and the teachers' learning goals. Thus, an important part of a constructivist-oriented curriculum should be the negotiation of meaning.

Constructivist curriculum is encouraged to build it around the student's prior knowledge as well as hands on problem solving.

4.7 CURRICULUM AND CRITICAL THEORY

The critical theory holds that teachers live within the framework of social, political and cultural relationships. This framework reflects a certain degree of variety; therefore, the school curriculum should be designed on the basis of diversity.

The following are the main components of the school curriculum according to the critical theory (Goutek, trans. Pakseresht, 1388, p. 481):

- The formal curriculum- consisting of the common skills and usual subjects
- The hidden curriculum- consisting of the values, views, and behaviors.

The formal curriculum, which safeguards the current run of affairs, consists of the usual school subjects such as literature, Geography, and

social sciences. It advocates the existing power structure and provides students with the knowledge that is a social construct.

The hidden curriculum emphasizes competition, consumerism, and private ownership to sustain the current socioeconomic conditions. The following section reviews what the critical theorists have said on the concept of the hidden curriculum. Philip Jackson first used the term "The Hidden Curriculum" in his book entitled "Living in the Classroom" (1986) as he introduced education as the process of becoming a social being (Wikipedia, 2007).

The following factors form the hidden curriculum:

- School Rules and Regulations
- Personal Interactions
- Teachers and Student Relations
- Teaching Practices and the Hidden Curriculum Relationship.

The hidden curriculum consists of the messages that teachers, books, educational resources, and even school administration conveys to the students. Hidden curriculum includes a set of rules and subjects that construct power relationships and institutionalize them among students (Apple, 1979).

McLaren defines hidden curriculum as the implied teaching of the values and behavioral patterns in the context of informal education. He further adds that the hidden curriculum forces the students to accept the existing power relationships as well as the dominant ideology and norms in the name of moral behavior.

The critical theorists believe that the hidden curriculum serves the authorities as it puts schools at the service of power structure without having an awareness of their true function.

Modern schools are components of a social process and their performance must be judged within a definite socioeconomic framework. Therefore, the school curriculum must be studied as a cultural component. Curriculum must include all the cultural values that exist in a modern social institute. The critical theory holds that the relationship between the school curriculum and the community must be reviewed to make a distinction between the formal and hidden curricula, which leads to a better understanding of the dominant value system. It is also a matter of common consensus that teaching practices are subject to interpretation and convey different sets of meanings, values, cultural norms, and social practices (Giroux, 1979).

The educationalists need to consider the function of hidden curriculum as a component of social inequity as in most cases the formal curriculum is nothing but its confirmation. The critical theorists answer the question posed by Giroux on the processes that recreate the dominant power structure and safeguard inequity within the communities. A number of the

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critical theorists have focused on cultural concerns by regarding the economic relationships as less important.

Giroux says that the hidden curriculum can be studied through the social processes that are reflected in students' classroom interactions (McLaren,, 1998,). Students resist against school norms but it must not be taken as an act of open rebellion. Some of the students who have gained an understanding of the school curriculum decide not to react in any manner; the critical theorists believe that these students need to be pinpointed.

The hidden curriculum is in line with the norms and sexual values, which form the acceptable values of the majority, although there is, always an air of equity in the educational settings. The school curriculum recreates the values of a patriarchal society.

The critical theorists believe that the school curriculum must be inclusive of individual differences such as racial backgrounds and social objectives. This new approach to school curriculum has changed the function of teachers and students in modern schools by enabling students to think critically. There is a need to review the existing educational philosophies that are reflected in the school curriculum. These changes will best show up in the social goals and objectives of the community.

4.8 CURRICULUM AND POSTSTRUCTURALIST THEORY

Poststructuralist theory allows among other things an investigation into relations between the individual and the social in specific sites. It does this through a focus on the centrality of language in the organization of human experience. Post structuralism attempts to work productively with, rather than against the complexity of human existence.

Poststructuralist theory is valuable for curriculum for the following reasons:

- i. Because it takes social complexity seriously and attempts to work with it rather than reducing and marginalizing it; that is, it addresses practice;
- ii. Because it refuses the opposition between the individual and the social and has ways of investigating the relation between them;
- iii. Because it theories power and allows an explicitly politically informed research practice.

Post structuralism encourages a way of looking at the world that challenges what comes to be accepted as 'truth' and 'knowledge'. Poststructuralists always question how certain accepted 'facts' and 'beliefs' actually work to reinforce the dominance and power of particular actors within international relations. Post structuralism doubts the possibility of attaining universal laws or truths, as there is no world that exists independently of our own interpretations.

4.9. LET US SUM UP

This chapter began with the understanding of the concept of curriculum development and with its theories .Curriculum in education has to reckon constructivism, critical theory and also poststructuralist theory. If we expect to achieve the higher aims of objectives of complete education which is bound to bring the change in human behavior with holistic approach one has to revisit all this theory while framing the curriculum and also implementing in education.

4.10 UNIT END EXERCISE

- 1. Define the Concept of Curriculum development.
- 2. State the principle of curriculum development.
- 3. Explain the concept of Theories of Curriculum development.
- 4. State and explain the concept of Curriculum and Constructivism.
- 5. Explain Concept of Constructivist curriculum development.
- 6. Explain the Curriculum and Critical Theory.
- 7. Write a short note on Poststructuralist theory.

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MODELS OF CURRICULUM DESIGN

Unit Structure

- 5.0 Objectives
- 5.1 Introduction: Concept of Curriculum design
- 5.2 Objectives Model and the Process Model
 - 5.2.1 Objectives Model comprises four main steps
 - 5.2.2 Structure of Objectives Model
- 5.3 The Process Model
- 5.4 Tyler's Model
 - 5.4.1 Tyler's Model- Step of Model
- 5.5 Wheeler's Model
 - 5.5.1 Phases of Wheelers model
- 5.6 Kerr's Model
- 5.7 Let Us Sum Up
- 5.8 Unit End Exercise
- 5.9 References

5.0 OBJECTIVES

After completing this unit, you will be able to:

- 1. Discuss various models of curriculum design.
- 2. Steps in various curriculum design models.
- 3. Explain steps in curriculum design in relation to models of curriculum.

5.1 INTRODUCTION

Curriculum design is the planning span of time when instructors organize the instructional units for their respective course. Curriculum design is a complex but systematic process that involves planning activities, readings, lessons, and assessments that achieve educational goals.

A model is really the first step in curriculum development. A curriculum model determines the type of curriculum used; it encompasses educational philosophy, approach to teaching, and methodology. The good news is, unless you've been hired to design curriculum, you won't come across many curriculum models. However, it's good for educators to be familiar with the models used in their schools.

This unit covers a variety of models of curriculum design in order to make this understandable and manageable. Being a teacher it's important for you to understand and implement the curriculum which the school has designed.

This unit covers the following models of curriculum design:

- Objectives model and the process model,
- Tyler's model,
- Wheeler's model, and Kerr's model.

5.2. OBJECTIVES MODEL AND THE PROCESS MODEL

The title of the model states clearly it gives emphasis of content and that is purely based on the specific objectives. In this model the objectives play an important role so in a way to achieve the objectives the content is set. In this model the objectives have to be planned with specifying expected learning outcomes in terms of specific measurable behaviors.

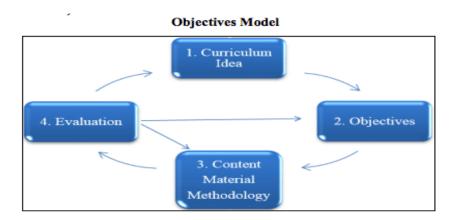
The objectives model of curriculum design contains content that is based on specific objectives. These objectives should specify expected learning outcomes in terms of specific measurable behaviors.

5.2.1 Objectives Model Comprises Four Main Steps:

- Considering and granting on broad aims which are analyzed into objectives,
- Constructing a curriculum to achieve these objectives,
- Refining the curriculum in practice by testing its capacity to achieve its objectives, and goals.
- Communicating the curriculum to the teachers through the conceptual framework of the objectives. (Gatawa,1990: 30)

5.2.2 Structure of Objectives Model

- 1. Curriculum Idea
- 2. Objectives
- 3. Content Material Methodology
- 4. Evaluation



Models of Curriculum Design

Adapted from Gatawa, B. S. M. (1990: 28). The Politics of the School Curriculum: An Introduction. Harare: Jongwe Press.

Curriculum Idea: In simple words it is said that it is an overall instructional programme that covers several activities that teachers should plan on the basis of content to achieve the ultimate decided objectives.

Objectives: The fixed goal or destination of teaching learning process. The objectives are the core part of this teaching learning process.

Content Material Methodology: The word cum indicates inseparable and indivisible. In the term "content-cum- methodology" homogeneity and integration of content knowledge and teaching method is implied. The integration of the 2 can enhance effectiveness of teaching.

Evaluation:

- 1. Explain the four steps of the objective model.
- 2. Write short notes on the structure of the objective model.

Conclusion: In this model Evaluation is done at each stage of the curriculum design. Content, materials and methodology are derived from the objectives.

5.3 THE PROCESS MODEL

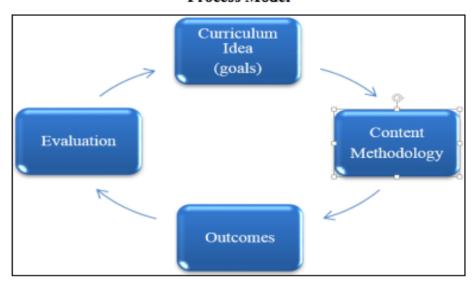
Process model focuses on how things happen within the learning and is more open-ended. Curriculum that specializes in the method model emphasizes how students are learning, what their thinking is, and the way it will impact future learning. This model gives much importance to the process of teaching learning and how it works.

Using This Model Considers That:

- Content has its own value. Therefore, it shouldn't be selected on the idea of the achievement of objectives.
- Content involves procedures, concepts and criteria which will be wont to appraise the curriculum.
- Translating content into objectives may end in knowledge being distorted.
- Learning activities have their own value and may be measured in terms of their own standard. For this reason, learning activities can stand on their own. (Gatawa, 1990: 31)

THE PROCESS MODEL:

Process Model



Adapted from Gatawa, B. S. M. (1990: 28). The Politics of the School Curriculum: An Introduction. Harare: Jongwe Press

Content and methodology has to decide from the stated goals and very importantly this process believes that all the steps of this model have outcomes that can be evaluated.

In the process model the structure components focus on the system of review, determining how the curriculum will come up for revision. The evaluation results from the outcome are fed into the goals, which will later influence the content and methodologies and there is no direct evaluation taking place as in objectives model is expected here in process model the evaluation has depend on content and methodologies.

5.4 TYLER'S MODEL

The Tyler Model, developed by Ralph Tyler in the 1940's, is the quintessential prototype of curriculum development in the scientific approach.

Tyler wrote down his ideas in a book Basic Principles of Curriculum and Instruction for his students to give them an idea about principles for making curriculum. The brilliance of Tyler's model is that it was one of the first models and it was and still is a highly simple model consisting of four steps.

- 1. Determine the school's purposes
- 2. Identify educational experiences related to purpose
- 3. Organize the experiences
- 4. Evaluate the purposes

Tyler's Model



(Adapted from Urevbu, A. O. (1985: 20). Curriculum Studies.)

5.4.1 Steps of Tyler's Model

The first step is to figure out what the school's or class's objectives are. To put it another way, what are the requirements for pupils to be successful? Natural aims are markers of mastery in each discipline. All objectives must be in line with the school's concept, which is sometimes overlooked when developing curriculum. For example a school is designing an English curriculum, and can set a goal for students to produce essays. This is just one of the curriculum's numerous goals.

Step two is to create learning opportunities that will assist pupils in completing step one. For instance, suppose students are required to complete an essay assignment. A teacher could demonstrate how to write an essay as part of the learning experience. The kids could next work on their essay writing skills. The experience (discussion and writing of an essay) is in line with the goal (Student will write an essay).

The third step is to organize your experiences. Is it better for the teacher to demonstrate initially or for the pupils to learn by writing right away? Either technique could work, and the preference is determined by the teacher's mindset and the students' needs. The point is that the teacher must decide on a logical order for the students' experiences.

The fourth and last phase is to evaluate the objectives. The teacher is now evaluating the students' abilities to compose an essay. This can be accomplished in a variety of ways. For example, the teacher could assign pupils to write an essay on their own. If they are able to do so, it indicates that the students have met the lesson's goal.

The model is linear in nature, starting from objectives and ending with evaluation. In this model, evaluation is terminal.

The Tyler model is still considered by many to be the strongest model for curriculum development. Tyler, evaluation is a process by which one matches the initial expectation with the outcomes.

5.5 WHEELER'S MODEL

Wheeler's model for curriculum design is an improvement upon Tyler's model. Instead of a linear model, Wheeler developed a cyclical model. Evaluation in Wheeler's model is not terminal. Findings from the evaluation are fed back into the objectives and the goals, which influence other stages.

Wheeler model of curriculum development indicates curriculum development is a continuous cycle. According to this model, curriculum development should be responsive to changes in the education sector and make appropriate modifications as per the need of changing objectives and goals.

1. Aims, goals and objectives 2. Selection of learning experiences 4. Organisation & integration of experiences

Wheeler's Model

Wheeler's Model Adapted from Urevbu, A. O. (1985: 22). Curriculum Studies.

5.5.1 Phases of Wheelers Model

This model is comprised of five interconnected phases:

- 1. Aims, goals and objectives
- 2. Selection of learning experiences
- 3. Selection of content
- 4. Organization and integration of learning experiences and content
- 5. Evaluation

Once the circuit has been implemented once, it commences again at the first step and goes on onward to constantly improve the curriculum in the face of any change that may have been imposed or happen naturally.

Aims should be discussed as behaviors referring to the end product of learning which achieve the ultimate goals. As Wheeler's model intends, aims are formulated from the general to the specific in curriculum planning. These results in the formulation of objectives at both an enabling and a terminal level.

5.6 KERR'S MODEL

Kerr's model of curriculum design According to J. Kerr ideas the objectives are distinguished from learning experience and knowledge, selected for transferring. In Kerr's model, objectives are divided into three groups: effective ,cognitive, psychomotor. Kerr stresses that it should be organized, integrated, sequenced and reinforced.

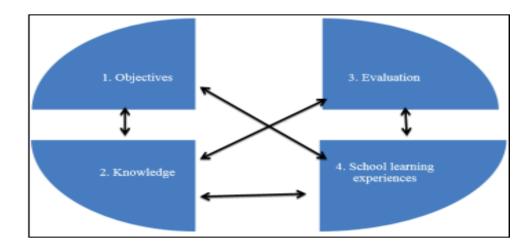
Evaluation in Kerr's model is considered as collection of information in terms of curriculum efficiency. It is important to note that J. Kerr's ideas in curriculum modeling dominated in the 1960-s and 1970-s in Great Britain and America.

British education expert E. C. Wragg (1997) goes further in defining school curriculum beyond the educational programme with defined goals, content, techniques and methods of its implementation.

Most of the features in Kerr's model resemble those in Wheeler's and Tyler's models. However, Kerr divided the domains into four areas (Urevbu, 1985: 23):

- Objectives,
- Knowledge,
- School learning experiences.
- Evaluation

A simplified version of Kerr's model of curriculum design is shown below.



The model further indicates that knowledge should be (Urevbu, 1985):

- · Organized,
- Integrated,
- · Sequenced, and
- Reinforced.

5.7 LET US SUM UP

The curriculum design models discussed show that curriculum designing is conducted stage by stage. Some of the models discussed consider the process to be more important than the objectives. Other models take objectives to be the most important feature of curriculum design.

Generally, all models stress the importance of considering a variety of factors that influence curriculum. Now that you have read about the types of curriculum design, factors that influence curriculum design and models used to design the curriculum, the next unit discusses the personnel and departments involved in the curriculum design process.

5.8 UNIT END EXERCISE

- 1. Explain the concept of curriculum design?
- 2. Explain the objectives model and the process model.
- 3. What is the difference between the objectives model and the process model of curriculum design?
- 4. Explain Tyler's model of curriculum design.
- 5. Explain the Wheelers and Kerr's model of curriculum design. Explain all the steps of both models.

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CURRENT TRENDS IN CURRICULUM DEVELOPMENT

Unit Structure

- 6.0 Objectives
- 6.1 Introduction
- 6.2 An Overview
- 6.3 Autonomy and Curriculum Development
- 6.4 Curriculum for Inclusion- Need, Importance and Challenges
- 6.5 E-Learning and Curriculum Development
- 6.6 Unit End Exercise
- 6.7 References

6.0 OBJECTIVES

After going through this unit, you will be able to

- Understand the need for autonomy and curriculum development
- Explain the need, importance and challenges for curriculum for inclusion
- Understand e- learning and curriculum development

6.1 INTRODUCTION

Educational system has undergone drastic changes since independence. Recent times demands that quality is short in education and hence has introduced Key Performance Indicators to evaluate performance in educational institutions. Grades have become more meaningful and the belief that it should measure student proficiency based upon clearly defined learning objectives. In previous times, education was not focused on the needs of the learner and the choice of subjects were given at a much later age of their education. Educators while framing the curriculum,now look at the needs of learners, their interest and also pave the way for integration. Technology and its use in the teaching learning process became vital. This made it easier for teachers to create individualized lessons for their students based on their capabilities.

Inclusive Education (IE) is a new approach towards educating the children with disability and

learning difficulties with that of normal ones within the same roof. It brings all students together in one classroom and community, regardless of their strengths or weaknesses in any area, and seeks to maximize the potential of all students. It is one of the most effective ways in which to promote an inclusive and tolerant society.

6.2 OVERVIEW

Autonomy is a widely used concept in education policy and practice. The etymology of the concept derives from the Greek *autonomos* 'having its own laws'. The concept of autonomy mingles around individuals' or groups' ability and capacity to self-rule, and governance.

When applied to educational practice, this distinction and complex concept may indeed mean a variety of things. School autonomy could be more complicated since all those in the school operate in various roles and hence it is difficult to gauge who possesses the autonomy- the principals, the teachers or the learners. Autonomy always brings in constraint and focusing on ways in which autonomy is constrained as well as enjoyed.

Inclusive Education (IE) is defined as a process of addressing the diverse needs of all learners by reducing barriers to, and within the learning environment. Inclusive education is a process means attending the age appropriate class of the child's local school, with individually tailored strengthening the capacity of the education system to reach out to all learners.

6.3 AUTONOMY AND CURRICULUM DEVELOPMENT

Since Autonomy is giving freedom to an individual to do what one wants to do. It also brings in responsibilities. When autonomy is given to any educational institution, there are a lot of responsibilities placed in that institution. The different autonomy includes framing of the curriculum. When such autonomy is given then, the curriculum framers, constructors are given the freedom to frame the curriculum in such a way that the needs of the learners are kept in mind. The philosophy of the institution is blended in the curriculum too.

The learners' varied needs and interests are sought to the maximum. The differently abled students and the disabled students are catered differently while framing the curriculum. There is flexibility and when the curriculum is framed in an autonomous educational institution, they seek that the holistic development of the learner is kept paramount. There can be flexibility in the learning outcomes for the disabled children. Autonomy demands high quality education. Many educational institutions are seeking to become autonomous.

6.4 CURRICULUM FOR INCLUSION- NEED, IMPORTANCE AND CHALLENGES

Inclusive education means education of all students, where all students are equal participants in the learning process. ... Inclusive education is the need of the hour. The tag line includes the excluded. Hence curriculum must reach out to the differently able and curriculum is the best way that can be done. Curriculum framers must bear that in mind that if we are catering to Right to Education as per the constitution to all irrespective of

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color, caste, disability and creed, the curriculum must be so framed that it caters to all students. There is a dire need to upgrade and improve the development of curriculum for inclusive education both for teachers and the children with special needs. It attempts to reach out to all learners, restructuring the culture, policies and practices in schools so that they can take into consideration students from different regions.

It is one of the most effective ways by which we can promote an inclusive and tolerant society. Inclusive education is a strategy of making education universalized irrespective of any disability within the learner and to maintain equity in the society. It emphasizes that children with special needs can be included in a holistic platform without any kind of isolation. Avoiding the option of segregation and making them confined within the boundaries of special schools, experts of inclusive education are advocating an inclusion of children with special needs into the common schools.

Need For Inclusive Education

Inclusive education plays a pivotal role in the educational frontiers.

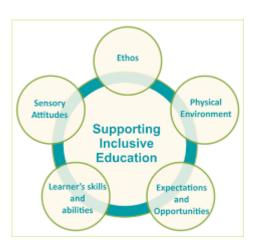


It motivates and gears up the parent's involvement in their children's education and programmes of their schools. It fosters a culture of respect and belonging. It also provides the opportunity to learn about and accept individual differences. It helps to build in communication skills, love, understanding, empathy for the differently

abled children. Right to education, free and compulsory education for all children up to the age of 14, Universalization of Education are the key components of Inclusive education. Discrimination of students based on their disability is not accepted today and therefore the need for inclusive education.

Importance

It brings in learners of various culture, family backgrounds into one classroom and this varied group grows simultaneously and thus unity, love and brotherhood is fostered at a very young age. Thus, all the differently able students are brought into the mainstream. It is an effort to include children with special needs into the normal and regular schools.



This builds in acceptance both on the teachers and learners' point of view. Some of the benefits include: friendship, life skills, social skills, personal principles, comfort level with people who have special needs, and caring classroom environments. The most important function of friendships is to make people feel cared for, loved, and safe. In an inclusive educational setting, low-achieving students are able to get extra help even though they did not qualify for special education. Classmates of students with disabilities also experience growth in social cognition, often can become more aware of the needs of others in inclusive classrooms. An interesting side effect is that these parents report that they also feel more comfortable with people with special needs because of their children's experiences. Students with disabilities can create long-lasting friendships that would not be otherwise possible, and these friendships can give them the skills to navigate social relationships later on in life.

Challenges:

- > Characteristics of Individual Pupils:
- Lack of access to the mainstream
- Lack of awareness and attitude
- Lack of trained teachers
- ➤ Large class size
- Lack of child centered and relevant curriculum
- ➤ Lack of improper infrastructure
- ➤ Accountability

Few Measures for Implementing Inclusive Education

Inclusive education helps the disabled child to develop a sense of pride in their work because

they actually feel like they accomplished something. Building bridges in the educational system for inclusive education is paramount.

So, there are following measures for better implementation of Inclusive Education in India. The Right to Education (RTE) must apply to all citizens of India. State and Central Governments as well as all the other social actors should recognize the importance of a broadened concept of inclusive education that addresses the diverse needs of all learners. A policy of inclusion needs to be implemented in all schools and throughout the Indian education system (NCF, 2005). Schools should prepare students for life irrespective of being marginalized, children in different circumstances. Rural special education programmes should be planned differently and should be integrated and also help the disabled learners in their own environment. Flexibility is important in inclusive education and must be reflected in the methods and materials used to give these children

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the widest possible access to the regular curriculum. An inclusive school must enable education structures, systems and methodologies to meet the needs of all children, particularly those who face the greatest barriers to achieving their right to education. Guardians, parents need to be involved in the decision-making concerning their child. They should be seen as partners in the education process. Where there is such cooperation, parents have been found to be very important resources for the teachers and the schools.

6.5 E-LEARNING AND CURRICULUM DEVELOPMENT

E-Learning consists of teaching which can be based in or out of the classrooms, the use of computers and the Internet. E-learning definition is defined as providing Training and development to the Students/Employees through various electronic media such as the Internet, audio, video etc.



Web-based learning is meant by e-learning which commonly referred to as electronic learning or virtual learning.

Today people first search for their queries on the internet rather than looking for books

or asking someone. Hence, this has led to the **Importance of E-Learning** in Education.

There are interactive classes and courses on different topics or programs or degrees that are delivered completely on the net. Emails, live lectures, and video conferencing are some of the mediums that enable the participants to give their views on a particular topic and then discuss them further.

Through video conferencing or live chat, there is a great possibility of discussing different subjects. Static pages like course materials printed for the benefit of all the participants are also made available

Meaning and Concept of E Learning

E-Learning is where knowledge is shared through various learning resources such as e-books, CDs, webinars and more. It has transfigured the traditional method of chalk and board style of learning imparted to the students. E-learning education makes more simpler, productive

Unlike this, **e-Learning education** makes giving and receiving simpler and productive.

E-Learning is defined as courses which are specifically delivered through the internet everywhere unlike the traditional classroom where the teacher is teaching. Teaching and learning both become simpler, easier, and more effective.

Importance of E Learning

- empower learners and enhance their skills. a degree certificate can be obtained, without actually attending any formal schooling or colleges.
- Flexibility of time is seen in e learning
- Ensures that learning takes place at a much faster pace.
- According to psychology, the audio-visual method of teaching leads to a disciplined learning environment. There are effective tutor and student engagements.

Advantages of E Learning

- E- learning can accommodate every learner's needs.
- Flexibility of learning is to the highest,
- Teachers and the learners do not need to be at a fixed place.
- Productivity is the highest.
- E-Learning lets you be in sync with modern learners and updated with the current trends
- It ensures quick delivery of lessons
- It ensures consistency in learning.
- E-Learning education is that it is fast and does not require much cost. The long training period, infrastructure, stationery, travel expenses, etc. is reduced.
- Effectiveness of the transferred or imparted knowledge and learning is high and powerful.
- It promotes a self-paced learning process.
- Through e-learning, students can develop a self-paced training schedule.
- Flexibility of time

6.6 UNIT END EXERCISE

Write long answer:

- 1) Elucidate the need and challenges of autonomy in education
- 2) Explain how does autonomy helps in the development of the curriculum
- 3) Elaborate the need for inclusive education in modern scenario.

Write short notes on:

- 1) Importance of inclusive education
- 2) Advantages of E learning in education
- 3) Ways to implement inclusive education

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