Curriculum Design and Development

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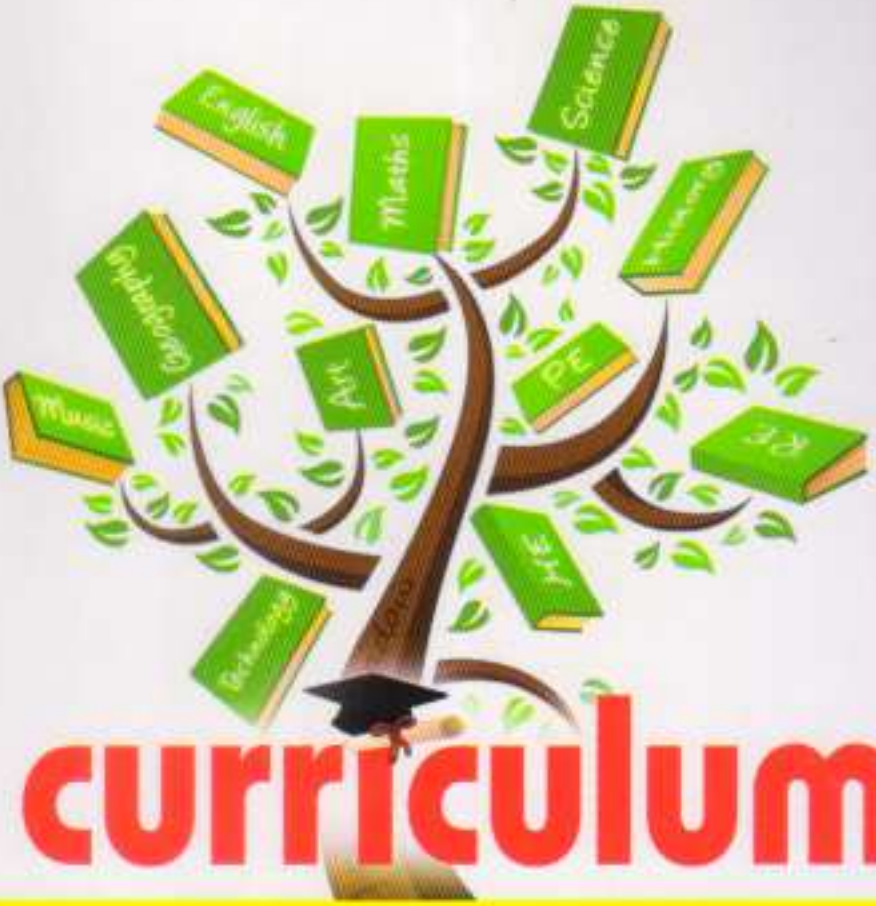
CURRICULUM DESIGN AND DEVELOPMENT

AS PER THE NEW SYLLABUS OF TAMILNADU TEACHERS EDUCATION UNIVERSITY

M.Ed., First Year



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Preface

I take this opportunity to praise the Almighty for his leading Hitherto.

This Curriculum Design and Development book description and analysis of the subject is the Indian context. It covers the syllabi of Tamil Nadu Teachers Education University on this subject in simple and lucid language drawing examples from our society and Indian educational system. It is a compulsory subject for M.Ed., I year students.

"It is the supreme art of the teacher to awaken joy in creative expression and knowledge". **Albert Einstein**

Someone once said that curriculum development is not something done to teachers but through with them. This implies that teachers must be involved in curriculum development and they should have the appropriate skills and knowledge to be able to make a contribution to curriculum development. When one reflects on the role of the teacher as curriculum developer, the whole issue of teacher participation and freedom, as well as democracy in the classroom, teachers should be empowered in regard to the whole process of curriculum development.

This book is a synthesis of extensive collection of curriculum. This book is thus intended to make a contribution not only to the field of curriculum but also covers all the categories of curriculum development. This book seeks to describe and examine the processes of curriculum development and teachers-in-training with fundamental issues and practices in curriculum development. The book tries to provide as many examples as possible of how some of the practical problems in curriculum development have been addressed by practitioners in many parts of the world.

As educators increasingly incorporate digital technologies in school administration and in the planning and implementation of instruction, we must consider how this shift impacts teachers, learners, and curricula. By curricula, we mean traditional/hidden notions of curriculum and schooling as well as a polymodal curriculum that incorporates multi-textual narratives, situated/digital literacy, and new ways of teaching and learning.

This book presents models, ideas, examples, and theories to prod critical reflections leading to praxis that acknowledges local/global contexts, histories, cultures, and conceptual frameworks.

Thanking you

By,

Authors

DR.C.THANAVATHI

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Course Code: FPCDD CURRICULUM DESIGN AND DEVELOPMENT

Course Objectives:

The prospective teacher-educators will be able to:

1. acquire the knowledge of the nature of the curriculum

2. understand the determinants of curriculum design

3. comprehend the various principles involved in curriculum design

4. understand phases of curriculum process

5. recognise models of curriculum development

6. analyse the approaches of curriculum organization

7. understand the models of curriculum implementation

8. understand the factors influencing effective teaching

9. recognise the various approaches and models of curriculum evaluation

10. comprehend the strategies and models of curriculum change.

UNIT- I: THE NATURE OF CURRICULUM

Definition of curriculum: Curriculum as a/an Plan, Experience, Objective, Product, Process, Subject Matter – Principles of Curriculum Construction.

UNIT- II: DETERMINANTS OF CURRICULUM

National Aspirations and Needs – Cultural and Social Change – Factors influencing Curriculum: Political, Social, Economic, Technological, Environmental Factors – Changes in Values – Value System – Foundations of Curriculum: Philosophical, Sociological and Psychological Foundations of curriculum.

UNIT- III: CURRICULUM DESIGN

Components of Curriculum design – Sources of curriculum design – Conceptual framework: Horizontal and Vertical organisation – Design dimensions considerations: Scope, Integration, Sequence - Articulation, Balance and Continuity.

UNIT - IV: PROCESS OF CURRICULUM DEVELOPMENT

Phases of Curriculum Development process: Need assessment, Formulation of aims, goals and objectives, Selection of content, Selection of learning experience, Organization of content and learning experience and Evaluation.

UNIT - V: MODELS OF CURRICULUM DEVELOPMENT

Technical-Scientific Models: Tyler's Model, Hilda Taba's Model, Saylor and Alexander's Model - Non-technical Non-scientific Models: Kohl and Holt's Model, and Rogers Model.

UNIT-VI: APPROACHES OF CURRICULUM DESIGN

Subject- Centred Designs: Subject design, Discipline design, Broad- field design and Correlation design – Learner-centred designs: Child-centred design, Experience-centred design, Romantic design and Humanistic design – Problem-centred Designs: Life-Situation design, Core design and Social Reconstruction design.

UNIT - VII: CURRICULUM IMPLEMENTATION

Models of Curriculum Implementation: Overcoming Resistance to Change (ORC) Model, Leadership Obstacle Course (LOC) Model, Linkage Model, Organizational Development (OD) Model and Rand Change Agent (RCA) Model – Factors influencing Curriculum Implementation.

UNIT - VIII: CURRICULUM TRANSACTION

Concept of teaching-learning – Teaching-Learning Process - Creating an effective environment – Effective Teaching – Factors influencing effective teaching- Instructional system – Need to enhance curricular transactions – Different types of enhancing curriculum transactions.

UNIT - IX: CURRICULUM EVALUATION

Concept, Definition, Need, Importance, Source Aspects and Methods of Curriculum Evaluation – Approaches of Curriculum Evaluation: Bureaucratic, Autocratic and Democratic Evaluation – Models of Curriculum Evaluation: Tyler's Objectives-centred Model – Stufflebeam's CIPP Model and Robert Stake's Congruence – Contingency Model.

UNIT X: CHANGE AND INNOVATION IN CURRICULUM

Definition, Need, Factors influencing the change in curriculum – Dimensions of curriculum change - Curriculum Change and Innovations - Context of Curriculum Change and Innovations – Strategies andModels for Curriculum Change and Innovations – Planning and Executing Change – Restructuring the curriculum.

SUGGESTED ACTIVITIES:

1. Conduct a seminar on determinants of curriculum.

2. Talk by teacher educators on process of curriculum development.

3. A debate on various models of curriculum implementation.

4. Discussion on various approaches of curriculum organization and submit a report on merits and demerits of the same.

5. Prepare a report on various models of curriculum evaluation.

UNIT 1
THE NATURE OF CURRICULUM

Introduction

As a teacher, you need to know what curriculum means in order to:

- ❖ Relate education to the socio-economic, technological, political and environmental demands of your society.
- ❖ Relate content or the body of knowledge to your local setting.
- ❖ Apply the most effective and relevant teaching and learning methodologies.
- ❖ Evaluate teaching and learning processes in your education system.

One of the most important activities of the university is the development of curriculum or course outlines in consonance with the national and international demands and realities. For the last few decades, scholars have been raising doubts and questions about the validity of heavy reliance on a subject-

centred approach to curriculum development that is dominated by textbook contents. Furthermore, the convergence of academic disciplines in the form of broad field and problem-orientation to knowledge incorporating a variety of theoretical perspectives requires innovative procedures for the development of curriculum. For this purpose, it is imperative that university teachers are aware of modern trends in the development of curriculum.

The key component of any curriculum is its instructional objectives or learning outcomes. To determine the extent to which these objectives or outcomes have been achieved, there is a need to assess students' learning. Students' assessment is a very complex task. Teachers often do not have the necessary background to meet its requirements appropriately. Hence, it is also necessary that teachers are exposed to a variety of tools to measure students learning.

Content

This unit will cover the following topics:

- ❖ definition of curriculum,
- ❖ curriculum perspectives, and
- ❖ principles of curriculum.

Objectives

After completing this unit, you should be able to:

- ❖ Define curriculum.
- ❖ Explain curriculum perspectives.
- ❖ Discuss principles of curriculum.

Meaning of Curriculum

The term curriculum has been derived from a Latin word 'Currere' which means a 'race course' or a runway on which one runs to reach a goal. Accordingly, a curriculum is the instructional and the educative programme by following which

the pupils achieve their goals, ideals and aspirations of life. It is curriculum through which the general aims of a school education receive concrete expression

The Word: Curriculum

Latin: Running Course
Scotland 1603: Carriage Way, road
United States 1906: Course of Study
United States 1940: Plan for Learning (Study)

1.1. DEFINITION OF CURRICULUM

A curriculum is a "plan or program of all experiences which the learner encounters under the direction of a school" (Tanner and Tanner, 1995: 158). According to Gatawa (1990: 8), it is "the totality of the experiences of children for which schools are responsible". All this is in agreement with Sergiovanni and Starrat (1983), who argue that curriculum is "that which a student is supposed to encounter, study, practice and master… what the student learns". For others such as Beach and Reinhatz (1989: 97), a curriculum outlines a "prescribed series of courses to take".

Curriculum has been defined by different persons in different ways:

Curriculum is a tool in the hands of an artist (teacher) to mould his material (pupils) according to his ideals (objectives) in his studio (school) – Arthur Cunningham

Curriculum is that which the pupil is taught. It involves more than the act of learning and quiet study. It involves occupations, productions, achievement, exercise and activity.

– H.H. Horne.

The Secondary Education Commission:- Curriculum does not mean academic subjects traditionally taught in the school, but it includes the totality of experience a pupil receives through

manifold activities that go in the school, in the classroom, library, laboratory, workshop, playground and in the numerous informal contacts between teacher and pupils".

Taba: "Curriculum is a plan for learning".

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

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

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

T.P. Nunn: "The curriculum should be viewed as various forms of activities that are grand expressions of human spirit and that are of the greatest and most permanent significance to the wide world".

From the definitions above, it is possible to state that a curriculum has the following characteristics:

- ❖ It comprises the experiences of children for which the school is responsible.
- ❖ It has content.
- ❖ It is planned.
- ❖ It is a series of courses to be taken by students.

In addition, a curriculum considers the learners and their interaction with each other, the teacher and the materials. The output and outcomes of a curriculum are evaluated. Bringing all these points together, the **curriculum** is viewed as a composite whole including the learner, the teacher, teaching and learning methodologies, anticipated and unanticipated experiences, outputs and outcomes possible within a learning institution.

Self-Assessment 1

The head of a village school decided to change the school timetable. The new timetable is shown below. Study it and answer the questions that follow it. (See the school timetable on the following page.)

SCHOOL TIMETABLE

Day of Week	Morning						Afternoon				Observations Made on Attendance
	1	2	3	4	5	6	7	8	9	10	
MONDAY	Maths	English	Local English	Social Studies	Music	R.M.E.	← SPORTS			→	Poor afternoon attendance
TUESDAY	English	Reading	Art	Maths	Science	Science	← SPORTS			→	Poor afternoon attendance
WEDNESDAY	Practical Subject	Practical Subject	Practical Subject	Physical Edn.	Physical Edn.	Physical Edn.	GARDENING	← SPORTS		→	High absenteeism rate
THURSDAY	Maths	English	Reading	Local Lang.	Science	Science	Music	R.M.E.	Prep	Prep	Good attendance both mornings and afternoon
FRIDAY	English	Maths	Music	Reading	R.M.E.	Science	Art	Social Studies	← SPORTS	→	Good morning attendance, fair afternoon attendance

Self-Assessment 2

1. In one or two sentences, define the term ‘curriculum’.

1.2. CURRICCULUM AS A PLAN

The curriculum is a planned program of learning opportunities to achieve broad educational goals and related objectives. The curriculum is all of the learning of students that is planned by and directed by the school to attain its educational goals. The curriculum is a "set of planned and guided learning experiences for the learners. Continuous and wilful growth. Daniel and Laura Tanner said curriculum is a plan for learning. Hilda Taba said curriculum is a plan for what is to be taught and is composed of what is to be taught, to whom, when, and how.

Curriculum Alignment is an agreement of what is written, taught, and tested. It is expected that adherence to a tightly aligned curriculum will result in greater student success and greater student learning.

Curriculum Planning and Coordination

It is important for the school to look at its arrangements for Planning and Coordinating the Curriculum. A review of this aspect of curriculum would explore:

- Structures for Planning
- Procedures for Collaboration
- Programme Coordination
- Cross-Curricular Issues

Planned curriculum is that type of curriculum which refers to the planned programs of objectives contents, instructions and assessments offered by a school. It is related to Formal curriculum. Most curriculum planning comes in five phases:

- framing the context
- planning the lessons
- implementing those lessons

- ❖ monitoring progress
- ❖ evaluating learning.

Teachers and school boards usually start with context in order to keep the overarching goals at the heart of the planning process. In a nuanced class like astronomy, the context is all but self-evident. For broader classes like "second grade" or "seventh grade math," however, school benchmarks and end goals must be kept in mind in order to keep a curriculum plan on track.

Individual lesson planning and implementation is where instructors have the most flexibility. Schools often set required reading lists or text books, but teachers can almost always organize their lessons and their classroom activities as they see fit. Teachers are usually in the best position to gauge individual student needs, and are generally encouraged to adapt lessons as needed to aid in understanding. Some flexibility is also important when it comes to current events and breaking news: should something happen in the world that directly relates to a lesson or otherwise impacts student life, teachers will often try to weave it into the day's instruction.

1.3. CURRICULUM AS AN EXPERIENCE

Curriculum is those experiences set up by the school for the purpose of disciplining students, and youth in group ways of thinking and acting. The curriculum is generally considered to be all of the experiences that learners have under the auspices of the school .The curriculum is that series of things that children and youth must do an experience. The curriculum is the life and program of the school, an enterprise guided living. The curriculum is composed of all the experiences children have under the guidance of teachers. The curriculum is now seen as the total experience with which the school deals in educating young people.

The experienced curriculum refers to how the child responds to, engages with, or learns from the events, people, materials, and social or emotional environment of the classroom. The concept of experienced curriculum is not synonymous with either child-centered curriculum or teacher-centered curriculum. Consideration of the experienced curriculum as a measure for student learning requires that the holistic, experienced meaning that classroom participation has for children is determined and then evaluated against the significance of that experience in terms of its educational value.

The experienced curriculum may be influenced by, but is not necessarily aligned with, the planned or intended curriculum as designed by the teacher or imposed by other external forces. It differs from other levels of curriculum (including mandated, formal, and operational) because it focuses.

Importance of Experience-Centered Curriculum:

(i) Experience-centered curriculum is framed according to the psychological bases of education.

(ii) The child gets direct experience when the information presented is live.

(iii) It creates a social environment.

(iv) It develops social qualities like cooperation, sympathy, love, belongingness and others.

(v) The teaching-learning situation is controlled.

(vi) The education is providing according to the needs and necessities of the child.

(vii) The child comes in direct contact in life situations.

(viii) Experiences are generated out of curiosity.

(ix) It develops group loyalties.

(x) It helps to solve the social problem of life.

1.4. CURRICULUM AS AN OBJECTIVE

Objectives are statements that describe the end-points or desired outcomes of the curriculum, a unit, a lesson plan, or learning activity. They specify and describe curriculum outcomes in more specific terms than goals or aims do. Objectives are also the instructions or directions about what educators want the students to be able to do as a result of instruction. Considered essential to goal setting and planning curricula, objectives aid students, teachers, and parents by specifying the direction of the curriculum and goals. Typically written by school districts, schools, and individuals, objectives also help ensure that educational processes are aligned and that instructional activities are directed toward the defined outcomes or learning.

There are several criteria for ensuring the appropriateness of objectives. Objectives must be developmentally appropriate

Curriculum Objectives:

- Creative and flexible approaches to learning and teaching
- Offering an innovative curriculum developed with the aspirations and interests of the student at the centre
- Making effective use of ICT and new technologies to motivate and inspire students
- Nurturing close partnerships with local and international organisations, giving students a wide range of opportunities to experience the world of work
- Providing opportunities for students to extend their learning outside of the formal curriculum

Learning objectives are no different than goals, because they serve four main purposes:

1. to describe the purpose of an activity (or intervention)

2. to establish the desired result
3. to identify the methodology to be used to get there
4. to determine how success will be measured

This being said, learning objectives are to be stated quite specifically so that they can be the most useful at directing the instructor as to what course of action to take.

1.5. CURRICULUM AS PRODUCT

The dominant modes of describing and managing education are today couched in the productive form. Education is most often seen as a technical exercise. Objectives are set, a plan drawn up, then applied, and the outcomes (products) measured. It is a way of thinking about education that has grown in influence in the United Kingdom since the late 1970s with the rise of vocationalism and the concern with competencies. Thus, in the late 1980s and the 1990s many of the debates about the National Curriculum for schools did not so much concern how the curriculum was thought about as to what its objectives and content might be.

It is the work of two American writers Franklin Bobbitt (1918; 1928) and Ralph W. Tyler (1949) that dominate theory and practice within this tradition. In The Curriculum Bobbitt writes as follows:

The central theory [of curriculum] is simple. Human life, however varied, consists in the performance of specific activities. Education that prepares for life is one that prepares definitely and adequately for these specific activities. However numerous and diverse they may be for any social class they can be discovered. This requires only that one go out into the world of affairs and discover the particulars of which their affairs consist. These will show the abilities, attitudes, habits, appreciations and forms of knowledge that men need. These will

be the objectives of the curriculum. They will be numerous, definite and particularized. The curriculum will then be that series of experiences which children and youth must have by way of obtaining those objectives. (1918: 42)

This way of thinking about curriculum theory and practice was heavily influenced by the development of management thinking and practice. The rise of 'scientific management' is often associated with the name of its main advocate F. W. Taylor. Basically what he proposed was greater division of labour with jobs being simplified; an extension of managerial control over all elements of the workplace; and cost accounting based on systematic time-and-motion study. All three elements were involved in this conception of curriculum theory and practice. For example, one of the attractions of this approach to curriculum theory was that it involved detailed attention to what people needed to know in order to work, live their lives and so on. A familiar, and more restricted, example of this approach can be found in many training programmes, where particular tasks or jobs have been analyzed – broken down into their component elements – and lists of competencies drawn up. In other words, the curriculum was not to be the result of 'armchair speculation' but the product of systematic study. Bobbitt's work and theory met with mixed responses. One telling criticism that was made, and can continue to be made, of such approaches is that there is no social vision or programme to guide the process of curriculum construction. As it stands it is a technical exercise. However, it wasn't criticisms such as this which initially limited the impact of such curriculum theory in the late 1920s and 1930s. Rather, the growing influence of 'progressive', child-centred approaches shifted the ground to more romantic notions of education. Bobbitt's long lists of objectives and his emphasis on order and structure hardly sat comfortably with such forms.

The Progressive movement lost much of its momentum in the late 1940s in the United States and from that period the work of Ralph W. Tyler, in particular, has made a lasting impression on curriculum theory and practice. He shared Bobbitt's emphasis on rationality and relative simplicity. His theory was based on four fundamental questions:

1) What educational purposes should the school seek to attain?
2) What educational experiences can be provided that is likely to attain these purposes?
3) How can these educational experiences be effectively organized?
4) How can we determine whether these purposes are being attained? (Tyler 1949: 1)

Like Bobbitt he also placed an emphasis on the formulation of behavioural objectives.

Since the real purpose of education is not to have the instructor perform certain activities but to bring about significant changes in the students' pattern of behaviour, it becomes important to recognize that any statements of objectives of the school should be a statement of changes to take place in the students. (Tyler 1949: 44)

1.6. CURRICULUM AS A PROCESS

Curriculum processes is a collective term that encompasses all of the considerations about which curriculum workers ponder and ultimately use to make choices in the development and evaluation of a curriculum project. These processes involve changes that some students, teachers, school staff, and community members welcome, but that others resist either actively or passively.

Rarely is a school curriculum developed from scratch, because most "new" curricula represent revisions of those in

existence. However, whether generating a brand-new curriculum or revising an existing one, curriculum development means recreating or modifying what is taught to students. Development includes a number of decisions whose outcomes aggregate as a curriculum design.

Curriculum designs are based on the primary sources of curriculum content (i.e., subject matter, needs of society-culture, or needs and interests of learners) that make possible the realization of a particular purpose of education. These purposes typically emphasize cultivating cognitive achievement (also known as transmitting the cultural heritage), developing learners to their fullest potentials, or preparing people for living in a changing, unstable world.

In addition to establishing a purpose for the curriculum project, developers also prepare a “views of education" statement outlining the anticipated relationships among teachers, students, and curriculum content. The views statement usually shows how the curriculum relates to the community beyond the school. Developers then select and organize content so that these relationships can be realized.

Curriculum use involves making arrangements for and using curriculum projects in school settings for the purpose of school program development. This term encompasses implementation and enactment used with technical and nontechnical processes, respectively. Sometimes technically developed curricula are tested in a few classrooms before they are put to full use in a district.

Both curriculum development and use involve several considerations that must be managed effectively. Among these are the scope and complexity of the curricular change, communication among all the participants’ involved, professional development, and resources.

1.7. CURRICULUM AS A SUBJECT MATTER

Curriculum is a design plan for learning that requires the purposeful and proactive organization, sequencing, and management of the interaction among the teacher, the students, and the content knowledge we want students to acquire.

The curriculum should consist of permanent studies – the rules of grammar, reading, rhetoric and logic, mathematics and, at the secondary level, the greatest books of the Western world. The curriculum must consist essentially of disciplined study in five areas& command of the mother tongue and systematic study of grammar, literature, and writing' mathematics' the science' history' and foreign language. The curriculum should consist entirely of knowledge that comes from the disciplines.

Subject Matter Curriculum

Until recently the secondary schools of our country have used essentially the subject matter approach in curriculum organization. The secondary education course was divided in different compartments, called subject. The middle school boy, for instance, might is taking as many as twenty subjects at one time. There was little if any planned relationship between the work in one subject and the others. Each subject was generally taught in an isolated way, and the mastery of subject matter in a certain narrow compartment was an aim in itself. The entire secondary education program was divided into specific separate curriculums, usually offered in different schools. The higher school preparatory curriculum was offered in the boys' middle school, the preparation-for-home-life curriculum in the girls' high school, and the separate agricultural, industrial and fishery curriculums in four different types of vocation**.**

1.8. PRINCIPLES OF CURRICULUM

i. Principle of Child Centeredness

- The curriculum should be child centered.
- It is means that what is to be given children in the form of learning experiences at a particular age and grade
- Curriculum should properly suit their age, abilities, capacities, interests, mental development and previous experience.
- Curriculum is meant for the development and welfare of schools of the children.
- Curriculum should fulfil the needs and requirement of the developing children

ii. Principle of activity centeredness

- Children are quite active by nature.
- Children always take interest, pay attention and are benefited by those learning experiences that involve activities, learning by doing and living on their part.
- Curriculum provides opportunities for the students to bring desirable changes in their behaviour in the ongoing teaching – learning process.

iii. Principle of environment centeredness

- The social science curriculum should be developed keeping in view the physical and social environment of the students.
- The subject stands mainly for acquainting the students with their physical and social environment – the people, social institutions, physical surroundings and their mutual interactions.
- The selection of subject material and learning experiences for the curriculum of the subject should be made on the basis of their link with the events, problems things and situations prevalent in their physical and social environment.

iv. Principle of understanding human relationships

- ❖ Development of necessary understanding, skills and attitude among the students for the proper maintenance of human relationships is one of the prominent aims of teaching social science in our schools.
- ❖ Curriculum in social studies which can help in the establishment of harmonious relationships not only among the members of a community and nation but also among the people of the whole universe.

v. Principle of community centredness

- ❖ Community contributes a lot in building the future of the young generation.
- ❖ Children may learn a lot through the various useful and relevant resources available in the community.
- ❖ Social science very much linked with the study of the community and its people and their interrelationships.
- ❖ Curriculum of social science may help the students in drawing closer to the community and contribute appropriately in its progress.

vi. Principle of Correlation

- ❖ It is also essential to follow the principle of correlation in the construction of the curriculum of social science.
- ❖ The principle of correlation ask for teaching social science in such a way as its link its study (1) with the study of other subjects and activities of the school curriculum (2) with the physical and social environment of the students (3) with the day to day life activities of the students.
- ❖ Curriculum provides appropriate opportunities to thee students to acquire the desired knowledge and experiences in a correlated and integrated manner for being utilized properly in their life.

vii. Principle of interest

- Interest is the mother of both attention and motivation- the well known key factors in the success of any teaching learning process.
- The study of content and experiences of thee subject social science that the students feel interesting and purposeful to them.
- Due attention should be paid for the inclusion of such interested topics content and learning experiences in the curriculum of social science that they my work for capturing and maintenance of thee interest and attention of the student of social science

viii. Principle of Individual differences or students

- It is natural for the students of social science to differ from one another in respect of their possession of general and specific abilities, capacities, interests, attitude, aptitudes learning potential and many other characteristics.
- Social science teacher to witness a wide variety of individual differences among the students of his classes eg. Gifted, dull, backward and average students showing differences in their choices and interest of the study off one or the other things.
- The development of social science curriculum, proper attention should be paid for making room to the varying types of individual differences found in the students of social science.

ix. Principle of utility

- According to this principle only those topics, subject material and learning experiences should be in the curriculum of social science which are found to possess any utility to the students.

- ❖ The perception of such utility the curriculum framer should always pick up a broad angle rather than the narrow.

x. Principle of fulfilling the needs of higher classes

- ❖ The study in social science of the students of a particular school does not end with the study of their subject in a particular grade or school stage.
- ❖ They have to travel on the path of their study from lesser to higher grade or class and from one steep of the educational ladder to the next higher one.
- ❖ Social science curriculum in a vertical way ie, increasing its difficulty level from one grade to the next higher grades.

xi. Principle of forward looking

- ❖ One should also take care of the principle of forward looking in the development of the curriculum of social science.
- ❖ The principle of forward looking of those topics contents and learning experiences related to social science that may prove helpful to students in leading their future life in a proper way.
- ❖ The topics and learning experiences helpful in training the students in civic competency, efficient citizenship, sociability, socio-cultural adjustment, democratic living, national understanding and world brotherhood for preparing them to lead their future life in the most desirable way.

xii. Principle of availability of time and other resources

- ❖ The implementation of curriculum carries no less significance than its construction or development.
- ❖ In the development of social science curriculum, it is essential to keep in mind the proper implementation of

this curriculum under thee prevalent conditions of schools , in reference to the possible of time and other men—material resources.

xiii. Principle of flexibility

- The principle of flexibility should also be paid due consideration in the construction of the social science curriculum.
- The social science curriculum should shows signs of flexibility and dynamism.
- The social science curriculum has to cater to the needs of thee individuals and society it has to be redesigned and remodelled to suite these changes.
- A social science teacher may need to have necessary flexibility in the implementation of the developed social science curriculum in his school.

xiv. Principle of consultation with teachers

- Teachers of social science play a key role in the implementation of the social science curriculum of any grade or stage.
- Teachers are the persons who actually have to implement and carry out the spirit of the curriculum.
- Teachers are the better persons to tell what is really suitable to their students.
- It is quite essential to seek proper involvement of the social science teachers in the development of the social science curriculum

xv. Principle of Leisure

- The curriculum should prepare the child for the use of leisure time. The capacity to enjoy leisure greatly determines a man's capacity to enjoy leisure greatly determines a man's capacity to work.

- ❖ The school curriculum should therefore prepare the would be citizens to use their leisure time effectively.

xvi. Principle of Conservation

- ❖ It has been stated that nations live in the present on the past and for the future. This means that the present, past and the future needs of the community should be taken into consideration.
- ❖ The past is a great guide for the present as it helps us to decide what has been useful to those who are living now.

CONCLUSION

Modifications introduced in the curriculum to improve or adapt it to new circumstances or priorities. This can be done through: minor adjustments that do not affect the curriculum structure; modernization to ensure that the curriculum remains current and relevant, reflects new developments in society and adequately prepares learners for life; innovation that brings new approaches and solutions; and large scale, system-wide reform that entirely reshapes the existing curriculum.

Summary

In this unit, you studied what a curriculum is and reviewed some of the educational views on which a curriculum is based. The four elements of the curriculum were also presented. As a teacher, you need to understand the different perspectives that drive the design of the curriculum. In the next unit, you will build on the concepts covered in Unit 1 by studying different determinants of curriculum

Reflection

1. Consider the education system in your country. On which curriculum perspective would you say your system is based?
2. Who decides on the content, methods, purpose and evaluation of your country's curriculum?

Unit Test

1. Draw a diagram that illustrates the connections between elements that are included in a curriculum.
2. Which groups of people may benefit from feedback generated by curriculum evaluation? Explain how any three groups benefit from the evaluation.

Possible answers to these questions are provided at the end of this unit.

Suggested Answers

Self-Assessment 1

Below are possible answers to the three questions.

1. Wednesday had no academic subjects. Learners or their parents did not consider practical subjects as meaningful learning.
2. Thursday had academic subjects which learners or their parents considered important. Therefore, attendance was good.
3. The parents understood curriculum to be a course of core academic subjects. Therefore, practical subjects and sports were not essential.

Self-Assessment 2

1. A curriculum is a composite whole including learner, teacher, teaching and learning methodologies, anticipated and unanticipated experiences and outcomes possible within a learning institution. You may have included other items in your answer.

Unit Test

1. Compare your diagram to the one provided in the unit. Note that there are four elements that are all interconnected.

There is a two-way connection between methods and evaluation and between content and evaluation. Also note that there are five components that make up the context.

2. Your answer could have identified some of the following benefits of curriculum evaluation:

Planners - improved institution

- identification of relevant resources for content and curriculum
- determination of the appropriateness of the curriculum
- identification of needs
- improvement of learners and teachers
- provision of feedback to society regarding the level to which goals and aims were achieved

Employers - preparation of workers with relevant skills for the work force

- trainable workers who know how to learn
- knowledgeable workers Learners - improved performance, knowledge and skills
- relevant content
- access to appropriate learning experiences
- increased opportunities Teachers - improved performance, knowledge and skills
- better understanding of learner
- increased confidence
- improved material resources
- improved working conditions
- improved teaching content

You may have identified additional benefits.

UNIT 2

DETERMINANTS OF CURRICULUM

Introduction

As a practicing teacher, you should be able to:

- identify the determinants of curriculum used in your school,
- relate the factors influencing curriculum with the curriculum they use, and
- determine the foundations of curriculum suitable for the students you teach.

Curriculum has had strong historical roots. From before Tyler crafted the major questions that we ask about curriculum (Tyler, 1949), theorists have been concerned about the ways in which teachers and schools plan learning experiences for all learners. These pre-occupations have influenced the development of Curriculum theory from the outset. Invariably, curriculum has long been influenced by factors outside of the school. Such influences include history, society, psychology and politics.

Objectives

After completing this unit, you should be able to:

1. List the determinants of curriculum.
2. Differentiate between the social and cultural change
3. Relate the foundations of curriculum to your own work situations.

Content

This unit will cover the following topics:

- ❖ cultural and social change
- ❖ factors influencing curriculum
- ❖ foundations of curriculum

2.1. NATIONAL ASPIRATIONS

Our curriculum weaves together the statutory requirements of the National Curriculum (2014) and the principles of our Aspirations philosophy: Self-worth; Engagement and Sense of Purpose.

Our school provides a curriculum that is balanced and broadly based, it promotes the spiritual, moral, cultural, mental and physical development of all pupils and prepares them for the opportunities, responsibilities and experiences of later life in modern Britain. The National Curriculum forms only one part of our school curriculum, we capitalise on every opportunity to broaden children's experiences outside of the classroom and the school day. We utilise classroom teaching, trips, visitors and assemblies in order to instil a clear understanding of the social values we abide by and knowledge of the cultural diversity of our Academy, the town, county and world we live in. Our close relationships with the local community ensure we can extend learning experiences and provide a context for learning.

Through a carefully planned blend of discrete subject teaching and thematic study, the curriculum is taught through

cross curricular themes based around the 6 Aspirations Conditions, these are carefully mapped out to ensure coverage of the National Curriculum.. The teaching of reading, writing, communication and mathematics underpin our curriculum, initially skills are taught discretely, however our cohesively cross curricular approach to planning ensures we capitalise on all opportunities for pupils to apply these skills through the wider curriculum.

Each of our 6 term units has a topic theme that is progressed through each year group, ensuring knowledge and skills are progressively taught and developed.

Term 1: **Belonging:** focusing on the world in which we live and how we can contribute to our world, both now and in the future, promoting identity, diversity and equality.

Term 2: **Heroes:** focusing on listening, respect: for others and self. We study people from the past who have made an impact on our life today, and lessons we can learn for the future.

Term 3: **Spirit of Adventure:** How to maintain a healthy, balanced lifestyle, learning how to manage risk including personal rights, responsibilities and consent.

Term 4: **Curiosity and creativity**: Linked to our Space Studio Schools, promoting the key skills of problem solving, questioning and creative thinking.

Term 5: **Leadership and responsibility**: preparing our children for the future world of work, exploring enterprise and developing an understanding of money.

Term 6: **Fun and excitement**: promoting self motivation, participation and engagement.

Throughout every theme children are given the opportunity to set personal goals and to reflect on their learning, so developing critical reflection skills.

2.2. NEEDS OF CURRICULUM

This is an important question that it has been raised for a long, long time. And there are five different reasons been given mainly for the need of a curriculum.

The first one is the need for human capital development. **Human capital development** for a country or for a society is so important because it ensures the necessary workforce needed to mobilize the country.

And the second reason is **social reconstruction**. We always want to reform our society, make it better again and again over a period of time. And at this point, WE would recall what Dewey has said about social reconstruction, he asserts that schools should work to shape the experiences of the young. So, that instead of reproducing current habits, better habits shall be formed. And, thus, the future adult society will be an improvement on their own. So, this is another major reason used all the time for curriculum planning and development.

And the third reason why we need a curriculum is very much based on the cultural reproduction aspect. That is **the transmission of existing cultural values** and norms from generation to generation, and continuing the cultural experience and sustaining it across time. There are so many good values that human beings have, for example like tolerance, or respecting the adults, and sharing and caring. All these values need to be continued. So, school curriculum, for example a subject likes civics and citizenship education, helps to sustain these kinds of values, continues these kinds of values.

And the next reason why we need curriculum, especially in this age, is for **cultural diversity**.

We see more and more of multi-cultural society around the world. And we want people to learn to live together in a harmonious way. So school curriculum can definitely help

students learn the different ways of living together. Adjusting, helping, you know, and working together.

And the final one, the reason for why we need the curriculum is **self actualization**. This very much individual based. Each child, each student has so much potential to offer. So, this curriculum will help them realise their own potential and know what they have within themselves. So, these are the five different reasons why we need a curriculum.

*According to Fairchild***:** "Social change means variations or modifications in any aspect of social processes, patterns or form."

According to Jenson **:** "Social change may be defined as modification in the ways of doing and thinking of people."

Common Features of Social Change:

Universality: Change is universal, an eternal and invariable law of nature. Social changes take place in all the societies of the world. Therefore, social change is universal in character.

Continuity: Social change is a continuous process. It does not take place at one point of time only. It takes place all the time at all the places. However, we can predict some direction of change.

Variation: Social change is relative in time, and according to a specific period in time, its rate may be high or low. The rate and quantum of change varies from one society to another depending upon the prevailing conditions.

Criteria of larger population: Only those changes are considered as social change that affects larger population. Social change is accepted as such only when the majority of individuals in a society accept it in their life, behaviour and beliefs.

Independence: Social change is independent of the desire and will of the people or society.

Forces: Social change is caused due to internal and external forces.

Planned as well unplanned: There was a time when changes were unplanned and un directed. But in the modern time changes can be planned to achieve the goals of the society.

2.3. CULTURAL CHANGE AND SOCIAL CHANGE

Relation between social change and cultural change: Many of the sociologists and social thinkers like Gillin and Gillin, Malinowski, Ruth Benedict, Pigginton etc. are of the view that social change and cultural change are one. They believe that social changes take place as a result of cultural changes and so they think that they do not differ from one another.

Difference between social change and cultural change: The fact is that social change and cultural change may be related but there is certain difference between the two.

Social change is a part of cultural change which is quite comprehensive affair. Social change implies change in social relation only. Cultural change is not mere social change. It also includes changes that take place in the field of art, knowledge, belief, law, science, ethics, philosophy and technology etc. Thus cultural change is a broader term. Secondly, society is a net work of various types of relationships and any type of change in the social relationship results into a social change. On the other hand, cultural change means change in the field or art, literature, religion etc. From this point of view, a social change is more dynamic as compared to cultural change because here the change takes place at a fast speed. However, social changes mainly refer to changes taking place in the non-material aspect of culture. Thus social change can be defined as the alteration or transformation in the material and non-material culture of a society.

Social change and cultural change in spite of similarity are quite different from one another. The difference between the two may be studied under the following heads:

Social relationship: Social change leads to changes in social relationship. As a result of this, some changes take place in the social structure. Cultural change brings about change in the art, science, literature etc. As a result of this change different aspects of the culture change take place. It does not mean that necessarily a change in the social structure or social relationship takes place.

Social change as a part of cultural change: Social change is more intimately related to change in the non-material aspect of culture whereas cultural change comprehends both material and non-material changes. Thus social change is a part of cultural change. Cultural change is more comprehensive, social change is relatively restricted or narrow. Social change is limited to changes in the structure of society and the functioning of this structure.

Causes: Social change is caused by physical causes as well as conscious efforts. The cultural change is the result of conscious and planned effort.

Speed: Social change is faster as compare to cultural change. New types of inventions and technological developments bring about changes in social structure and relationship. As compared to these changes, changes in religion, traditions, norms, values which form part of the culture, take place at a slower pace. The two are different but they are inter-related as well. Change in one necessarily affects the change in other.

Impact of culture on educational institutions:

The aims and ideals of the educational institutions are influenced by the values and patterns of the society.

Curriculum: The curriculum is prepared according to the culture of society. The system of education tries to realize the cultural needs of society through curriculum which conditions all educational activities and programmes.

Methods of teaching: Culture and methods of teaching are intimately connected. The changing cultural patterns of a society exert its influence upon the methods of teaching. Previously teaching was teacher centered where teacher used to give knowledge to the child. Now it has become student centered. The teacher considers the needs, interests, aptitude, attitude, inclinations, behaviour etc before teaching. In this way education is a method of preparing child for the future for effective living. In short we can say that cultural and social conditions generate the methods and techniques of teaching in a powerful manner.

Discipline: Cultural values influence the concept of discipline. The present cultural patterns of thinking and living are directly linked to our concept of discipline where the democratic values are accepted all over the world.

Text Books: Curriculum is contained in the textbooks. Textbooks are written according to the formulated or determined curriculum. Only those textbooks are welcomed which foster and promote cultural values and ideals.

Teacher: Each individual teacher is imbibed with the cultural values and ideals of the society of which he/she happens to be an integral member. Only such teacher achieves his/her missions successfully. They infuse higher ideals and moral values in children.

School: A schools is a miniature of a society. The total activities and programmes of a school are organized according to the cultural ideals and values of the society which establishes and organize the school. Hence, school is the centre of promoting, moulding, reforming, and developing the cultural pattern of the society.

2.4. FACTORS INFLUENCING ON CURRICULUM DEVELOPMENT

Several factors affect all curriculum development in meeting the needs of 21st century learners in both organized academic settings and corporation learning centers. Factors affecting curriculum development include government rules, which in turn brings other factors into the process. Valid curriculum development requires awareness of the diversity of the target community socially, financially and psychologically.

1. Political Factor

Politics affect curriculum development in numerous ways.

How politics influences curriculum design and development starts with funding. Both private and public educational institutions rely on funding for hiring personnel, building and maintaining facilities and equipment. All aspects of curriculum depend on local, state and national political standards.

Example

Politics affects curriculum development from defining goals, interpreting curricular materials to approving examination systems,

2. Social Factor

Society has its own expectations about the aims and objectives that should be considered when designing the curriculum. It also has a perception of what the product of the school system should look like. It is therefore necessary for curriculum designers to take in to account these societal considerations.

Example

Subjects who have gender education and political economy have proved difficult to include in the curriculum because of the resistance from some religious groups.

3. Economic Factor

Economics influences curriculum development.

Curriculum developed for in house training in corporations focuses on educating employees for promotions that bring better returns in profits. Nations financing education expect an economic return from educated students contributing to the country's economy with global competition abilities in technical fields

Example

Nations financing education expect an economic return from educated students contributing to the country's economy with global competition abilities in technical fields

4. Technological Factor

Technology driven curriculum development is the norm of the 21st century.

The computer technology of the 21st century influences curriculum development at every level of learning. Learning centers and classrooms increasingly provide computers as requisite interaction for studies among students. Technological multimedia use influences educational goals and learning experiences among students.

Example

Undergraduate and graduate degrees in computer technology increases in popularity.

5. Environmental Factor

Environment issues affect curriculum development.

World awareness and action toward reversing and ending pollution continues affecting curriculum development. Typical elementary classrooms teach recycling and healthy environmental practices.

Example:

Higher education in the sciences offers environmentally-focused degrees. e.g Environmental degree, bio-technology etc.

Self-Assessment 1

Why is education viewed as a political activity? Give at least four reasons.

The possible answers to this question are provided at the end of this unit.

Values

We all have values. A lot of times, though, we don't know exactly what they are. Values means they are the qualities and ideas about life that speak to what is important to us, that help guide our behavior and define who we are.

Our values come from our beliefs, and are formed by various means… our parents, our family, our culture, our life experiences, hearing other people's beliefs and forming our own opinions, etc.

Our morals come from our beliefs too, from what we believe is right and wrong. Some examples of values are: achievement, belonging, bravery, carefulness, challenge, compassion, dependability, family, generosity, health, honesty, humor, kindness, knowledge, making a difference, open-mindedness, peace, perseverance, respect, self-control, silliness, spirituality, success, trustworthiness, and uniqueness. There are many, many more.

2.5. CHANGES IN VALUES

We all have values and beliefs. And they change. They change because we want them to; they change sometimes even when we didn't mean them to. They change because something happens in our life; they change because something didn't happen. They change because we grow. Some values and beliefs don't change, but many do, and they continue to change throughout our lives. "The man who never alters his opinion is

like standing water, and breeds reptiles of the mind." – English poet William Blake Figuring out who we are is always a sticky process.

Our values and beliefs are a big part of that, and when they change it makes it even harder to know who we are. A lot of times, however, our experiences help change our values in ways that make sense. For instance, we may have believed that something is wrong and now we aren't so sure that's true. We may have believed we'd never do something, but then we do and we decide that it's okay. Sometimes, though, we don't think it's okay, and that's a clue that our values have not changed. That's the time to take a good look at why we're doing what we're doing, and how we really feel about it.

2.6. VALUE SYSTEM

Values are concerns about what ought to be. A value is a belief which need not rely upon facts or evidence, although a value position can be supported or challenged by knowledge propositions. Ryle (1949) talks of values as 'dispositions' which incline us towards specific structures, tasks and patterns of behaviour.

Reflecting values in education In an ideal world, national values which are clearly understood and shared by all, form a coherent thread which permeates the education system from aims through to outcomes in clear steps This coherence would be reflected from aims, through educational structure (duration of compulsory education, phases and types of schools), institutional organisation of pupils (grouping by age, general ability or curriculum choice), teachers (specialists or generalist; one per class or team teaching) and time. The curriculum (subject-based or interdisciplinary, balance between breadth and depth, and content) would be consistent with aims and structure and supported by appropriate teaching styles (achieved through initial and in-service teacher education) and materials. Finally, the methods and frequency of assessment would be chosen to

enable all students to demonstrate the extent to which they had achieved the educational aims and internalised national values. Where discrepancies arose, deficiencies in any of the stages could be identified and addressed.

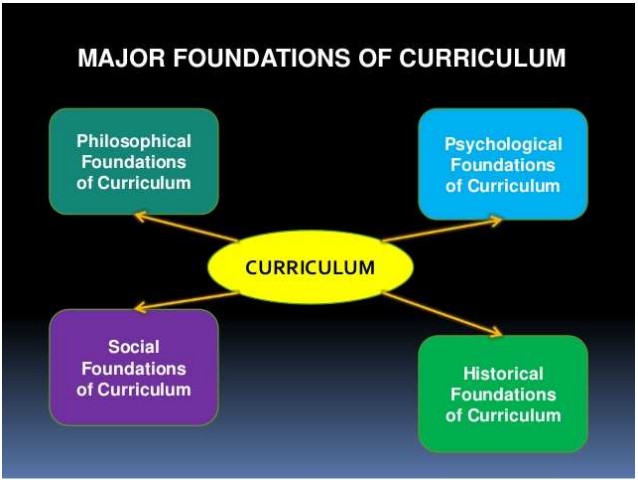
Self-Assessment 2

Social factors are very critical in designing a curriculum. Identify at least two social factors that should be considered when designing a curriculum.

Possible answers to this activity are provided at the end of this unit.

2.7. FOUNDATIONS OF CURRICULUM

The curriculum also belongs to the value system of the school system because it indicates the means and the sum total of activities in the school as to how to attain effectively and efficiently the aims, goals and objectives of the school system. The different curricula are the intermediate values in the school system in order to attain the terminal values embodied in the aims, goals and objectives of the school system. Faculty curricula will necessarily impede the attainment of these aims while an efficient and relevant curriculum is a potent way to attain the aims of the school system.



Foundations are the forces that influence the minds of curriculum developers.

In this way they affect the content and structure of the curriculum.

The curriculum reflects the society and culture of a country and this is the desire of a society that their children should learn the habits, ideas, attitudes and skills of the adult society and culture and educational institutional are the proper way to impart these skill. This duty of teacher and school to discipline the young of the society and provide them the set of experiences in the form of curriculum. The needs, knowledge and information of the society provide foundation in the formation of curriculum

2.8. PHILOSOPHICAL/IDEOLOGICAL FOUNDATION

It is concerned with beliefs.

What is real --- ONTOLOGY

What is true --- EPISTEMOLOGY

What is good – AXIOLOGY

Philosophy means the love of wisdom, it search for truth, not simple truth, It search for eternal truth, reality and general principles of life. Curriculum help in the practical use of knowledge in real life situations and understanding realities and ideas of life and this world that why curriculum is called the dynamic side of philosophy.

Curriculum is used for the modification of the behavior of the students and philosophy help in the process of finding new ways and basis for teachers and curriculum planner to modify their behavior. Philosophy also helps in the exploring new methods of teaching and how to apply in the classroom situation for better achievement of the teaching learning process. It also provides new ways and methods for the evaluation of student's achievement and evaluation of curriculum.

Philosophers of the past have made major influence in clarifying the association in the nature of knowledge and curriculum development process and also provide a foundation for curriculum; Plato presented a curriculum in his book "republic" at that times and it is still the core of the curriculum of today. Knowledge is given the high role in human life.

Today world economics and societies are changing very rapidly; it needs depth in every discipline of education in this high time.

Today the world emphasis on finding new ways through which man develops new concepts of reality and knowledge and to form a new structure of knowledge in this dynamic and changing time therefore a high value is given to discovery, invention and restructuring of knowledge and curriculum in new patterns. Now the new curriculum is open to new experiences, logical and critical thinking, and to bring about the concept of knowledge out of interpreted experience.

Philosophy and ideology of education provide rules and principles which lead the in decision-making regarding educational practices and polices planning. It Guides the curriculum planner on the basses of the philosophical and ideological belief of the society in the constructing of subject matter keeping in view the future demands and needs of the schools and help in the promoting of human life through social change in the behavior of the students. In Pakistan the ideological beliefs of the society is based on Islam.

Therefore they are looking for curriculum planner to introduce such curriculum in education system, which inculcate true knowledge of Islam and preserve the culture of Muslim society in new generation that why they believe that Islamic curricula should be based on the ideology of Islamic laws and principles.

Philosophical/ideological Implications on Curriculum

Philosophy and ideology has direct effect in curriculum planning because it guides the curriculum planner in the selection of the objectives and. As it provides guidelines in the selection of objectives, Learning experiences and content of the curriculum, and how to evaluate the curriculum, learning experiences and achievements of the students. Some justification provided for the implications of curriculum given by different researcher are as under (Rud Yard K. Bent and Urruh, n.d.);

- Various customs values, traditions and knowledge need to be preserved by transfer them to the next generation.
- The students also needed the knowledge of past and present in which they live, it help them in the process of adaptation and adjusting their self to new changes and new situation in life.

All those content of a subject who helps in intellectual development rather than practical value. It teaches student how to reason, develops mental ability to solve the problems in practical life situations. It helps in using different methods for search of eternal truth and how to analyze the knowledge and methods of inquiry.

- The Secondary school curriculum should designed for developing maximum potentialities of the students by including variety of leaning activities to educate each students to its highest.
- Schools should be a tool and leader in directing new changes in the curriculum rather than maintainers of curriculum.
- Students need skills and for that purpose some subject matter must be included in the curriculum to help them

in acquiring these skills like experimentation and the use of laboratory techniques so they advance the knowledge.

Socio Cultural Foundation

According to Murray print (1993). The society and culture exercise massive powers on the formation curriculum and the reason behind that it was society who created schooling to safeguard the survival of their cultural heritage, and survival of their species.

The purpose of curriculum planner and developers to translate traditional norms, philosophies, ethics, knowledge and attitudes in the objectives of curriculum, the content, learning processes and the evaluation of elements of the curriculum. Sociological factors have highest impact on the content of curriculum and that is the reason that curriculum developers and planner both reflect and transfer their own culture in curriculum. Therefore a curriculum without the reflection of culture is not possible for that reason one should consider what characteristic of the culture should be the part of curriculum and what not.

The social and cultural inspirations that affect curriculum designers consciously and unconsciously are apparent from the curriculum and their influence is deep. For example in Pakistan the curriculum is more reflective of the society and curriculum is design in a way that leads society to change. The society manifest through the curriculum and education, and the outcomes of the curriculum developers display the role of both of the above in curriculum development.

Because curriculum developers are the part of the society therefore they indirectly effected by the society and culture. Their cultural standards, attitudes and beliefs leave deep impact on the individuals because the curriculum designers

influence the selection of objectives, subject matter, teaching learning methods and the process of evaluation.

Example: A group of teacher formulated a new course for teaching in schools to enhance the quality of the subject in curriculum. After the completion of the subject matter when analyze again one could not determine some lesson were eliminated and some were included in the course, how the old content was evaluated even the teacher who constructed the curriculum for the subject was unable to clearly say what was the basis of their decisions. If story reading was a component of the revised curriculum, what proportion would be real reading? And Why? And what would be the method for the assessment of that lesson? What stories were selected and why these are questions need to be asked from the curriculum developers on the other hand, may be curriculum developers are well aware of society needs and they have planned intention to incorporate all those things in the curricula which the society need in the curriculum but the question is that the curriculum should student centered or society. Curriculum should be a tool for guiding the student's potentialities in directions or to develop those potentialities without any restrictions.

Some Social values, changes and conditions are included into some extent in some of the curriculum projects in the context of current social issues and problems, such as rapid growth of population, democratic values, urbanization, and management problems could be found in proposed program. Some vital problems and topics are considered in relation to concepts and key ideas drawn from the disciplines.

In another way in which the social situation is used as a source of content and information for the curriculum formulation may be found in the present-day situations that are selected to

light up the concepts and main ideas from the selected disciplines e.g. In mathematics program there may be some problems of social significance, for which student may use mathematical concepts to solve the problem. Or in others societal science program, socially important situations may be used to encompass and expand concepts and generalizations.

Therefore it can be concluded, that social and cultural forces have deep effect upon the curriculum. To find how much and to which degree the society and culture affect the education system of that society is controversial issue. Curriculum developer are the part of that society and culture therefore they should keep in mind that there decision could affect their culture and society. Therefore their decision should be culturally related to the society need and values.

Guideline given by Rud Yard (1969) related to curriculum planning decision-making, it derived from societal needs and goals.

- The goals of education emerge from the needs and wishes of the society
- When a society urge a need or a goal it becomes an educational objective and the school accepted that demand and they attempt to attain that goal by putting it into school objectives.

And when a societal goal become an educational objective then the school, teacher and student must make their efforts to achieve it and for that purpose appropriate educational facilities and methods must be planned.

If there is a conflict between the objectives and aims of majority and minority groups, the aims of larger group is accepted.

Educational aims are based on the study of sociological and political condition of the society and the main purpose of the curriculum is preservation and advancement of the society.

2.9. PSYCHOLOGICAL FOUNDATIONS

Psychological foundation is based on the individual differences, every student has its own unique personality and they have differences in their leering and skills. They are different in nature so they can't be treated alike in teaching learning process, some may be fast learner while other slow. Therefore the curriculum should be based on the above facts, and it should be design to support the capacity and potentialities of all the students.

Psychology play a vital role in the teaching learning process it is the foundation for all type of educational related programmed. The methods of teaching, the selection of content of subject and the methods and theories of learning, the overall development of the students and to inculcate the norms of the society in the students. Psychology helps in all the processes above in the development process of the curriculum.

In the past curriculum for child development and learning was developed in traditional ways without keeping in view the psychological implication in the development of curriculum.

Today psychology is the core and foundation element of all the learning processes; curriculum development, Child mental development, teaching methods, learning theories, administration of education system and planning, character building of the students, attitude of students and teacher, the society, the use of different technologies.

Today the researchers and Scholars using experimental approach to find new ways of teaching learning process, how

students learn under different conditions. They are finding new ways and materials from the analysis of teaching learning problem and formulating new approaches for teaching and learning process.

Psychology helps in all fields of education, it not just adds to knowledge; psychology is applied in practical class room situation as well as in the curriculum development process by defining teaching methods and origination of the curriculum.

In the process of using psychology in curriculum development process some positive concepts or ideas about teaching learning process emerged, it is reflected in the work produced by different authors.

- The traditional readiness concept for a difficult subject which require children maturity has been rejected by the modern researchers, now the researchers formed a new principle that the child can teach any subject on the condition that it provided keeping in view the principle of from simple to complex and that the students have the previous experience.
- When the importance is given to basic concepts and the process of inquiry for teaching learning and curriculum development process the transfer of learning and future learning are improved.
- the guided discovery of the relationships in the student learning outcomes, subject matter and in teaching methods play a very important role in the teaching learning process compare to those approaches in which the curriculum planner used the views and conclusions of other for developing curriculum.
- The Interest and motivation level of the students may be generated using the discovery method within the subject

itself, the content of the subject should be interesting and appealing to generate curiosity in the students to find more. In this way the student engage in finding the relationships in the subject matter presented to him, and engage the students in the process of inquiry.

- ❖ Meaningful conversation involves the students in the organizing or structuring of facts into conceptual system which help the students to generate new ideas, make new interpretations and raise new questions.
- ❖ The researchers prefer the use of inductive methods because it helps in the discovery through inquiry and help in the formulating of hypotheses and interpretation of information.
- ❖ To study a topic in depth or more helpful in the discovering the relationships between them than try to cover the whole material in once.
- ❖ The Depth of learning could be attained by applying different ideas, processes, theories, and models.
- ❖ Learning is improved when there is relationship order in the continuity of unit to unit from simple to complex in the instruction programme.
- ❖ The solving of problems helps the students in acquiring the concept development, and how to use different principles which lead the students to a higher level of mental development.
- ❖ It put emphasis on the organizing of ideas which helps the students to develop the skills to identify the relationships, improves their skills, remembers and retrieves old ideas; it provides a foundation for

generating new ideas and concepts, and helps in the transfer of learning.

Therefore it is said that the impact of psychological sources on the foundations of curriculum is more than significant and still on the rise. The scope of the psychology for applying in curriculum construction and its principles, concepts, processes. The role of psychology in the development of curriculum is vast and with each day it is becoming increasingly more meaningful and unavoidable.

The purpose of psychology and psychologist is the study of human behavior, the study of living being. Investigate and explain the behavior of animate creatures. Therefore, curriculum needs educational psychology to provide information particularly in five areas:

- ❖ Prepare objectives of education.
- ❖ Characteristics of the students.
- ❖ The leaning processes.
- ❖ The methods of Teaching.

CONCLUSION

The manner in which curriculum is delivered will be determined by the society in which is living. All of the definitions of curriculum have some commonality that will link to part of another definition. Curriculum is the information that is or will be taught. What determines how or what is important to teach will be defined by status, position and politics that are evolving at the time the curriculum is planned. There has been change in the definition of curriculum since its original, but that change in definition has accommodated the change in society. Overall curriculum as a definition has adapted with time but the method in which curriculum is delivered has changed.

Self-Assessment 3

If the local economy required more miners, how would this influence the curriculum?

Possible answers to this question are provided at the end of this unit.

Summary

In designing a suitable and relevant curriculum, curriculum planners should always consider political, social, economic, technological and environmental factors and theories in the field of child psychology. In the next unit, you will be introduced to different models of curriculum design.

Reflection

Do you think that the syllabuses and textbooks used in your schools adequately reflect your national ideology and the demands of your society?

Unit Test

Name four of the factors that influence curriculum design. Explain how any two of the factors influence the curriculum.

Possible answers to this test are provided at the end of this unit.

Suggested Answers

Self-Assessment 1

Education is viewed as a political activity because politics:

- ❖ determine and define the goals, content, learning experiences and evaluation strategies;
- ❖ influence the selection and interpretation of curricular materials;
- ❖ influence funding of education;

- ❖ influence entry into educational institutions and the examination systems; and
- ❖ play a part in the hiring of personnel.

Self-Assessment 2

In designing the curriculum, the following social factors should be considered:

- ❖ religion,
- ❖ culture, and
- ❖ the view of various groupings in society, including professional associations.

Self-Assessment 3

If the local economy required more miners, then the curriculum might be adjusted to include information and skills related to mining. However, it is also likely that no adjustments would be made to the formal curriculum set by the Ministry of Education because this government body may not feel that mining is a priority for the country as a whole.

Unit Test

Any four of the following factors could be considered in your answer.

Factor

- ❖ Political factors
  - see answer to Self Assessment 1
  - influence materials and their interpretation
  - influence the hiring of personnel
- ❖ Social factors
  - influence the selection and interpretation of resources
  - influence the hiring of personnel

- Economic factors
  - influence goals, content and learning experience
  - influence material production
  - influence standard of academic attainment
- Technological factors
  - same as economic factors
- Environmental factors
  - influence goals, content and learning experiences
  - influence material production

UNIT 3

CURRICULUM DESIGN

Introduction

In order for you to develop insight into the methods you can use to deliver teaching content, it is important to understand how a school-based curriculum is designed. This is the focus of this unit.

As a practising teacher, you should be able to:

- identify the components of curriculum design,
- relate the horizontal and vertical organisation with the curriculumthey use, and
- determine the curriculum design dimensions consideration for the students youteach.

A curriculum is a planned sequence of learning experiences.

In designing a curriculum, whether for a whole degree programme or for a particular unit, you are planning an intellectual 'journey' for your students - a series of experiences that will result in them learning what you intend them to learn.

Typically these experiences will include attendance at lectures and classes, work in small groups, private study, preparing work for assessment and so on.

Objectives

After completing this unit, you should be able to:

1. List the components of curriculum design
2. Differentiate between the vertical and horizontal organisation.
3. Relate the dimensions of the curriculum design to your own work situations.

Content

This unit will cover the following topics:

- components of curriculum design
- relationships between horizontal and vertical curriculam design
- dimensions and sequence of curriculum design

3.1. CURRICULUM DESIGN

Curriculum design includes consideration of aims, intended learning outcomes, syllabus, learning and teaching methods, and assessment. Each of these elements is described below. It also involves ensuring that the curriculum is accessible and inclusive, i.e. that student with disabilities, and from all backgrounds, can participate in it with an equal chance of success.

Components of Design

"To design a curriculum, we must consider how its parts interrelate," (Ornstein & Hunkins, 2014, p.153). The question, why do we educate, allows one to examine their own visions and philosophies. Curriculum design today has been molded by our past and has intentions to shape our future.

Aims

The aims of the curriculum are the reasons for undertaking the learning 'journey' - its overall purpose or rationale from the student's point of view.

For example, a degree programme may aim, among other things, to prepare students for employment in a particular profession. Likewise a unit within the programme may aim to provide an understanding of descriptive statistics. The stated aims of a curriculum tell students what the result of studying it is likely to be.

Note that the aims are the educational purposes of the curriculum. To attract more students to study may be one of our aims in offering the programme or unit, but it is not an aim of the curriculum offer.

Further guidance on writing aims for programmes and units is available in the 'Guide to writing aims and intended learning outcomes' section of the MAP.

Intended Learning outcomes

Learning outcomes are what students will learn if they follow the curriculum successfully (i.e. if they complete the programme or unit and pass the assessment).

Sometimes the phrase 'intended learning outcomes' is used to refer to the anticipated fruits of completing the planned 'journey'.

In framing learning outcomes it is good practice to:

a) Express each outcome in terms of what successful students will be able to do. For example, rather than stating 'students will understand why....' say 'students will be able to summarize the main reasons why...' This helps students to focus on what you are expecting them to achieve and it assists you in devising appropriate assessment tasks (see below).

b) Include different kinds of outcome. The most common are cognitive objectives (learning facts, theories, formulae, principles etc.) and performance outcomes (learning how to carry out procedures, calculations and processes, which typically include gathering information and communicating results). In some contexts affective outcomes are important too (developing attitudes or values, e.g. those required for a particular profession).

Further guidance on writing intended learning outcomes, together with helpful examples, is available in the 'Guide to writing aims and intended learning outcomes' in the MAP.

Syllabus

This is the 'content' of the programme or unit; the topics, issues or subjects that will be covered as it proceeds. In selecting content for inclusion, you should bear the following principles in mind:

a) It should be relevant to the outcomes of the curriculum. An effective curriculum is purposive, clearly focused on the planned learning outcomes. The inclusion of irrelevant topics, however interesting in themselves, acts as a distraction and may confuse students.

b) It should be appropriate to the level of the programme or unit. An effective curriculum is progressive, leading students onward and building on what has gone before. Material which is too basic or too advanced for their current stage makes students either bored or baffled, and erodes their motivation to learn.

c) It should be up to date and, if possible, should reflect current research. In some disciplines it is difficult to achieve the latter until students reach postgraduate level, but in many it is possible for even first year undergraduates to be made aware of current research topics.

Self-Assessment 1

What is a school curriculum?

Possible answers to this activity are provided at the end of this unit.

3.2. SOURCES OF CURRICULUM DESIGN

Science as a Source

- Based on the scientific method; the design contains observable and quantifiable elements.
- Problem solving is most important.
- Learning how to learn

Society as a Source

- Curriculum designers must notice the role that society will play in their curricular ideas and analyze the social situation.
- Political issues such as: No Child Left Behind and Race to the Top are still being used and revised in curriculum.
- Schools and their curricula are still being critiqued by radicals and liberals that don't feel that the curriculum serves underrepresented groups such as indigenous people, people of color, women and homosexuals.
- Effective curriculum designers realize the need for collaboration among diverse individuals and groups.

Moral Doctrine as a Source

- Subjects follow a hierarchy system
- Knowledge and spirituality
- Develop empathy, insight, empathy, compassion.
- William Pinar felt that viewing curriculum as religious text may allow for a blending of truth, faith, knowledge, ethics, thought, and action.

Knowledge as Source

- Celebrates Plato's academic views
- What knowledge is of most worth?
- What intellectual skills must be taught
- Knowledge may be a discipline

The Learner as a Source

- How do the students learn, form attitudes, generate interest, and develop values.
- Rousseou's theory of development
- Examining a child's cognitive ability
- This returns to the ideas of Science as a Source by putting an emphasis on the way our brain reacts and how we can develop curriculum through the brains activity

3.3. VERTICAL AND HORIZONTAL ARTICULATION OF THE CURRICULUM

Organization of contents according to the sequence and continuity of learning within a given knowledge domain or subject over time (vertical articulation to improve coherence) and the scope and integration of curricular contents from different knowledge domains within a particular grade level (horizontal articulation or balance to develop integration between subjects, disciplines or knowledge domains).

In a vertical curriculum, what is learned in one lesson prepares students for the next lesson. It establishes skills and knowledge which are used and further developed across a whole program of study. In this way, basic skills and knowledge are both developed and reinforced as other elements are introduced into study. This method of teaching is structured and progressive, focusing on building to advanced levels of knowledge.

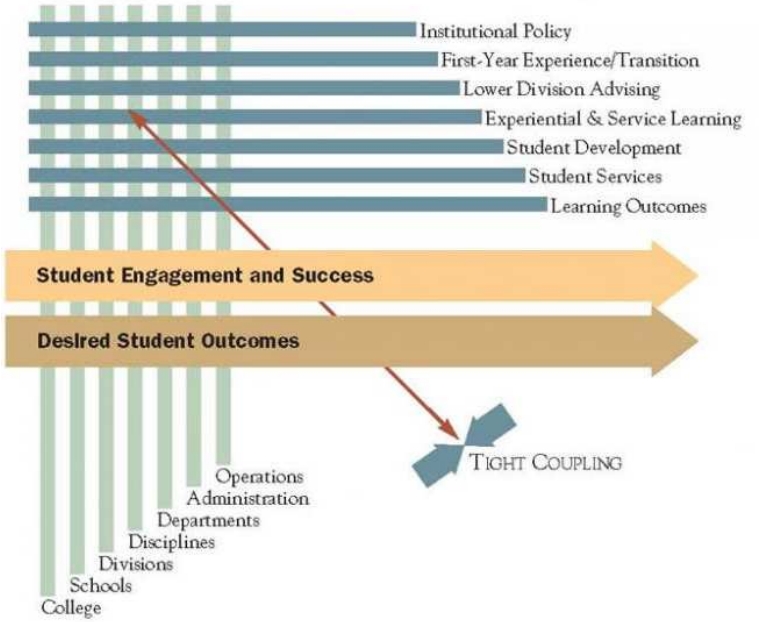
This vertical organizational structure is reinforced by centrifugal forces that create decentralization and locate governance, responsibility, and resources peripherally, rather than centrally; funding models in many institutions base the allocation of resources on credit hours, which drives money into individual schools based on student enrollments in courses (Ehrenberg 2000). Schools within larger institutions compete with each other for scarce resources and almost inevitably, and often by necessity, promote their own interests rather than those of the university at large. Centralized components of the institution—such as most student affairs offices, programs, and services—may struggle for resources in this context.

In these vertically organized institutions, there are important (and essential) horizontal forces; similarly, given the centrifugal, decentralized nature of decision making and resource allocation, there are nonetheless certain centripetal forces that pull some decision making, governance, and control to the center of the institution (Bourgault and Lapierre 2000; Kuh 1996; Mintzberg 1979). Notable horizontal forces include, of course, central administration (which may or may not have significant power; the extent to which power is centralized is directly related to how resources are allocated and managed), institutional accreditation, overall financial management, and certain levels of policy. But development, alumni relations, communications and marketing, enrollment management, and other core institutional functions are often performed to a greater or lesser extent by individual schools as well as by the institution as a whole. Similarly, central funding and policy development are centripetal forces—but the strength of those forces varies by institutional type, history, culture, and perceptions of the need for public accountability.

The inherent and necessary tensions between these horizontal and vertical elements generate and sustain complexity in institutions of higher education. Because each institution is of

a particular type and exists in its own context (i.e., public, private, rural, urban, etc.), the vertical and horizontal structures vary in number and dimensions from institution to institution; but because they are fundamental parts of postsecondary infrastructure, they each exist in some form at every institution (see fig. 1).

Figure 1. **Horizontal and Vertical Structures in Higher Education**



A horizontal curriculum means that what is studied in one particular course in an institution is in line with other, similar classes both in terms of course content and evaluation. Horizontal coherence means that teachers are evaluating students based on the standards for a particular subject and grade level.

Horizontal programmatic and curricular organization is expressed in a myriad of tangible ways. The change from focus on workforce development to lifelong career skills in community colleges over the past thirty years offers many examples of how

horizontal linkages enhance higher education practice. In a recent *New York Times* article (Frerking 2007), community colleges that are considered successful list the following attributes that intentionally and actively support student development: articulation agreements with colleges and universities that students are most likely to transfer into, thereby supporting students as they progress from year one to four-year degree completion; access to local arts, recreational, or vocational options that offer local, regional, or international internships, service learning, or other experiential learning for credit opportunities; learning communities that synthesize an array of life skills (e.g., time management) with content (e.g., English) courses; professors working and teaching in teams, including buildings and offices that allow professors and staff from multiple disciplines to share work space; required orientation and one-on-one advising, including a clear expectation that students develop and document career goals; on-campus programs devoted to providing students exposure to renowned artists, poets, scientists, and scholars; an environment that is aesthetically conducive to learning; academic programs that teach across disciplines (e.g., Great Books programs); expectations that students work to develop their own slate of honors classes; student involvement in professional honoraries or associations; and a focus on self-exploration of personal values via journaling. Many of these same programs have been shown to be factors in supporting and enhancing student success more generally (Hearn 2006). Moreover, enhancing student success means that these programs share the common thread of requiring horizontal institutional functioning to operate effectively.

Self-Assessment 2

1. What pattern of curriculum design is used in your country? Is it centralised or decentralised? Explain.

2. What considerations about your own learners were taken into account in making the curriculum you are using?

Possible answers to this activity are provided at the end of this unit.

3.4. DESIGN DIMENSIONS CONSIDERATIONS

Curricularist must, when considering design, view it on several dimensions; scope, integration, sequence, articulation, balance and continuity.

Scope: When considering curriculum design, educators need to address the breadth and depth of its content. Some refer to this as the horizontal organization of the curriculum. Scope means not only the depth and range of content provided to students, but also all the varieties and types of educational experiences that are created to engage students in their learning. The challenge of determining scope goes back to the basic question posed by Herbert Spencer, "What knowledge is of the most worth?".

Integration: Integration refers to the linking of all types of knowledge and experiences contained within the curriculum plan. It is essentially a design feature to bring into close relationship all the bits and pieces of the curriculum in ways that enable the student to comprehend knowledge as unified, rather than individualized. In schools today, many argue that the curriculum integration, educators should arrange curricular phenomena such that the students' intellects and hearts, and perhaps their souls, are addressed.

Sequence: When considering sequence, curricularists are challenged to deal effectively with curricular elements so that the curriculum fosters cumulative and continuous learning, or what is referred to as the vertical relationship among curricular areas. Specifically, curricularists must decide how content and experiences will occur and reoccur so that students have opportunities to connect and enrich their understanding of the

curriculum presented or experienced. There is long standing controversy over whether the sequence of content and experiences should be based on the logic of the subject matter or on the way in which individuals process knowledge. Several sequence patterns to keep in mind include the following: simple to complex learning, whole to part learning, and chronological learning.

Articulation: Articulation refers to the interrelatedness of various aspects of the curriculum. The relation can be either vertical or horizontal. Vertical articulation depicts the relationships of certain aspects in the curriculum sequence to lessons, topics, or courses appearing late in the program's sequence. For instance, a teacher might design introductory or ninth grade algebra so that concepts in the algebra class are related to key concepts in a geometry course. The key reason for addressing vertical articulation is to assure that students receive those leanings that are prerequisite to information presented later in the curriculum. Horizontal articulation refers to the association between or among elements occurring simultaneously. Horizontal articulation takes place, for instance, when curriculum designers attempt to develop interrelationships between eight-grade social studies and eighth-grade English courses. Articulation is difficult to achieve. Curricula arranged by subjects often pay no attention to connections with any other subject matter. Another reason for the difficultly is that we are not as far along in cooperative curriculum development as our educational talk might indicate.

Balance: When designing a curriculum educators are also concerned that appropriate weight be given to each aspect of the design so that distortions do not occur. Balance is problematic because we are constantly striving to localize and individualize the curriculum in its content and experiences while at the same time addressing a tradition that plans curriculum for the masses.

Educational policies also have an impact. Keeping the curriculum 'in balance' requires continuous fine-tuning of the curriculum.

Continuity: Continuity deals with the vertical manipulation or repetition of curriculum components. For example, if reading skills are an important objective, then it is necessary to see that there is recurring and continuing opportunity for those skills to be practiced and developed. Over time, the same kinds of skills need to be reinforced. Continuity is most evident in Bruner's notion of the 'spiral curriculum'. According to Bruner, basic ideas and structures need to be developed and redeveloped in a spiral fashion-increasing in depth and breadth as students move through school.

3.5. CURRICULUM DESIGN'S RELATIONSHIP WITH ITS COMPONENTS

3.5.1. Scope

Ornstein and Hunkins stated, "Most consider a curriculum's breadth and depth of content-that is, its scope," (2014, p.158). Scope is the horizontal organization of the depth of content. Affective domain focuses on values and attitudes while the psychomotor domain focuses on motor skills and coordination. The emphasis is on what should be covered and in what amount of detail. This design could take a yearlong or be chunked into smaller organized units dived into lessons and activities.

3.5.2. Integration

"Integration refers to linking all types of knowledge and experiences contained within the curriculum plan," (Ornstein and Hunkins, 2014, p.160). The unified horizontal alignment throughout all subject matter. Organized around real world issues and concerns. "In 1960 Hilda Taba pointed out that the curriculum was disjointed, fragmented, segmented, and detached from reality," (Ornstein and Hunkins, 2014, p.160).

3.5.3. Sequence

The focus is on cumulative and continuous learning; the debate lies between which comes first experience or content. Brain development has proven through observations of nerve cells that at birth we are born with more unconnected nerve cells. Our experiences throughout our life build connection within our nerve cells building lifelong connection. Ornstein and Hunkins stated, "Curricular experiences should increase brain development," (2014,p. 159). Rousseau's third big idea developmental theory and Piagets theory focused on cognitive development and its affects. Orthanel Smith, William Stanley and Harlan Shores developed the Four Principals of Sequencing. They are;

1. Simple to complex learning
2. Pre-requisite learning
3. Whole-to part learning
4. Chronological learning

Articulation vs. Balance

Vertical and Horizontal interrelatedness.

3.5.4. Continuity

"Brain research suggests that the amount of brain employed in performing a process may explain somewhat how well an individual's perform particular task, (Ornstein and Hunkins, 2014, p.160). Continuity is the vertical repetition of continuous instruction to increase depth and breadth of knowledge. The myriad experiences allow problematic thinking, fuels enriched rigor within the interrelationships between basic ideas and structure.

Self-Assessment3

List at least three factors that should be considered when designing a school curriculum. Explain how each affects the design of the curriculum.

Possible answers to this activity are provided at the end of this unit.

CONCLUSION

For most of us without a background in education, a curriculum often means a sequence of lectures, teaching timetables, examination sessions and grading. Occasionally, a curriculum can also turn into a turf battle with different departments vying for increased teaching hours for their particular discipline.

But a curriculum is more than just sequences of lectures and timetables. According to Kern, et al. (1998), a curriculum is "a planned educational experience". Hence, the main intention of curriculum design at the tertiary level is to foster the academic development of students. Once a specific group of students is identified for whom the curriculum is to be designed, the purpose for the curriculum design can then be made clear from the outset. To carry out curriculum design and implementation successfully and to prevent conflicts of interests, it is also vital that a coordinator is appointed and full institutional support be made available.

If a curriculum is to be "a planned educational experience", then curriculum design and implementation should follow a sequence of steps that operates like an upward and downward spiral with a robust feedback system for the adjustment of each step.

Summary

School curriculum designing follows a systematic process involving seven stages. This process is also influenced by a number of factors. Each was discussed in this unit. It was noted that curriculum development is greatly influenced by the mental, physical and emotional needs of children. Once the school

curriculum has been put in place, a syllabus must be developed. The next unit will take you through syllabus design.

Reflection

Review your school curriculum. What subjects and learning experiences are offered? Is your curriculum appropriate for the learners in your school?

Unit Test

1. What is a school, in the context of this unit?
2. Why should a school curriculum be designed? Give two reasons.

Possible answers to these questions are provided at the end of this unit.

Suggested Answers

Self-Assessment 1

The answer could include some of the points below.

A school curriculum is:

- a list of subjects and learning experiences offered to a learner by a school, and
- aprogramme of selected subjects or content and learning experiences capable of modifying or changing learner behaviour.

Self-Assessment 2

1. Your answer will vary because it depends on where you teach. However, if your curriculum is designed at the national level, then it is considered to be a centralised curriculum. You would have a decentralised curriculum if decisions were made locally at a school, district or provincial level.
2. The learners' mental, physical and manipulative skills should have been taken into account when the curriculum at your school was designed.

Self-Assessment 3

Your answer could include some of the following points:

Factor

- National goals and subject options available on national list:
  - Give national identity and philosophy.
  - Address national needs.
- The learner's physical, mental and emotional state:
  - Physical: consider disabilities, complexity of manipulative skills.
  - Mental: consider level of maturity and cognitive development.
  - Emotional state: consider values and attitudes to be developed.

Unit Test

1. A school is a social institution designed to give formal learning to children.
2. Reasons for designing a school curriculum are:
   - to facilitate the systematic development of the learners' mental capacities,
   - to facilitate the systematic development of the learners' manipulative or psychomotor skills,
   - to develop the learners' values and attitudes,
   - to meet societal needs, and
   - to improve the local environment.

Your responses may have included the above points, but you may have made other suggestions that are relevant to your school and community.

UNIT 4

PROCESS OF CURRICULUM DEVELOPMENT

Introduction

The unit you have just started focuses on resource allocation. It deals with the allocation of various types of resources needed to make the teaching and learning process an instrument of achieving national and school curricular goals and objectives. Without resources, these goals and objectives cannot be realized.

As a practicing teacher, you should be able to:

- identify the need of assessment
- relate the performance of schools with the curriculumthey use, and
- determine the curriculum with learning experience suitable for the students' you teach.

The Curriculum Development (CD) process encompasses the design and development of integrated plans for learning, the design of implementation of the plans, and of the evaluation of the plans, their implementation and the outcomes of the learning experience.

Curriculum design is a process of critical questioning to frame learning and teaching. The main purpose of the process is to translate broad statements of intent into specific plans and actions. The intention is to ensure, as far as possible, alignment between the three states of curriculum: the planned curriculum, the delivered curriculum and the experienced curriculum

Objectives

After completing this unit, you should be able to:

1. List the need for assessment
2. how to select the content.
3. Relate the organization content to your own work situations.

Content

This unit will cover the following topics:

- ❖ definition of curriculum development
- ❖ selection of content and selection of learning experience
- ❖ organization of content and learning experience

4.1. PHASES OF CURRICULUM DEVELOPMENT PROCESS

"Every Journey Begins With The First Step."

The curriculum development process systematically organizes what will be taught, who will be taught, and how it will be taught. Each component affects and interacts with other components. For example, what will be taught is affected by who is being taught (e.g., their stage of development in age, maturity, and education). Methods of how content is taught are affected by who is being taught, their characteristics, and the setting. In considering the above three essential components, the following are widely held to be essential considerations in experiential education in non-formal settings:

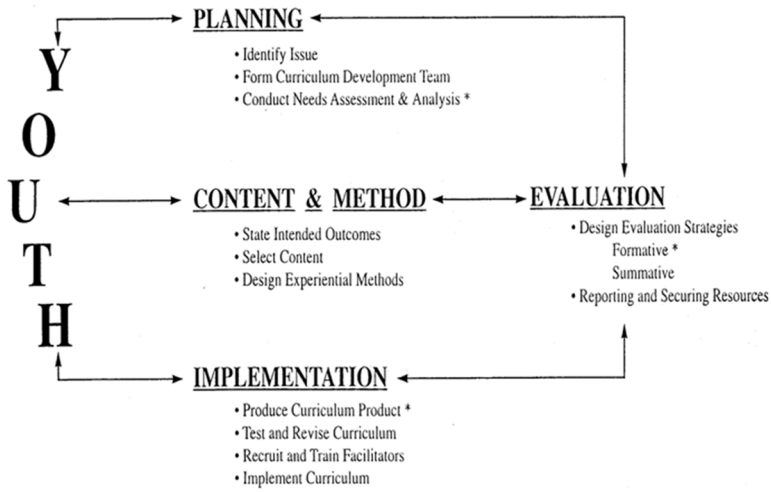


Figure 2

Phases and steps in Curriculum Development further illustrates how the 12 essential steps progress from one to the next. It also shows the interaction and relationships of the four essential phases of the curriculum development process: **(i) Planning, (ii) Content and Methods, (iii) Implementation,** and **(iv) Evaluation and Reporting.** It is important to acknowledge that things do not always work exactly as depicted in a model.

Each phase has several steps or tasks to complete in logical sequence. These steps are not always separate and distinct, but may overlap and occur concurrently. For example, the curriculum development team is involved in all of the steps. Evaluations should occur in most of the steps to assess progress. The team learns what works and what does not and determines the impact of the curriculum on learners after it is implemented. Each step logically follows the previous. It would make no sense to design learning activities before learner outcomes and content are described and identified.

PHASE I: PLANNING

"Nobody plans to fail but failure results from a failure to plan."

The planning phase lays the foundation for all of the curriculum development steps. The steps in this phase include:

(1) Identify Issue/Problem/Need

(2) Form Curriculum Development Team

(3) Conduct Needs Assessment and Analysis

(1) Identify Issue/Problem/Need

The need for curriculum development usually emerges from a concern about a major **issue** or problem of one or more target audience. This section explores some of the questions that need to be addressed to define the issue and to develop a statement that will guide the selection of the members of a curriculum development team. The issue statement also serves to broadly identify, the scope (what will be included) of the curriculum content.

(2) Form Curriculum Development Team

Once the nature and scope of the issue has been broadly defined, the members of the curriculum development team can be selected. Topics covered in this section include: (1) the **roles and functions** of team members, (2) a process for **selecting members** of the curriculum development team, and (3) principles of **collaboration and teamwork.** The goal is to obtain expertise for the areas included in the scope of the curriculum content among the team members and develop an effective team.

(3) Conduct Needs Assessment and Analysis

There are two phases in the needs assessment process. The first is procedures for **conducting a needs assessment.** A number of techniques are aimed toward learning **what** is needed and by **whom** relative to the identified issue. Techniques covered

in this section include: KAP - Knowledge, Attitude, and Practice Survey; focus groups; and environmental scanning.

Analysis, the second part of this needs assessment step, describes techniques on **how to use the data and the results** of the information gathered. Included are: ways to identify gaps between knowledge and practice; trends emerging from the data; a process to prioritize needs; and identification of the characteristics of the target audience.

PHASE II: CONTENT AND METHODS

"As the twig is bent, so grows the tree"

Phase II determines intended outcomes (what learners will be able to do after participation in curriculum activities), the content (what will be taught), and the methods (how it will be taught). Steps include:

(4) State Intended Outcomes

(5) Select Content

(6) Design Experiential Methods

(4) State Intended Outcomes

Once the issue is defined, the curriculum team is formed, the needs assessed, analyzed and prioritized, the next step is to refine and restate the issue, if needed, and develop the **intended outcomes or educational objectives.** An intended outcome states what the learner will be able to do as a result of participating in the curriculum activities.

This section includes: (1) a definition of intended outcomes, (2) the components of intended outcomes (condition, performance, and standards), (3) examples of intended outcomes, and (4) an overview of learning behaviors. A more complete explanation of the types and levels of learning behaviours are included in the ***Addendum*** as well as intended outcome examples from FAO population education materials.

(5) Select Content

The next challenge in the curriculum development process is **selecting content** that will make a real difference in the lives of the learner and ultimately society as a whole. At this point, the primary questions are: "If the intended outcome is to be attained, **what** will the learner need to know? What knowledge, skills, attitudes, and behaviours will need to be acquired and practiced?"

The **scope** (breadth of knowledge, skills, attitudes, and behaviours) and the **sequence** (order) of the content are also discussed. Intended outcomes of population education with content topics are provided in *the **Addendum*** section as an example and application of how intended outcomes are linked with content.

(6) Design Experiential Methods

After the content is selected, the next step is to design activities (learning experiences) to help the learner achieve appropriate intended outcomes. An experiential learning model and its components (i.e., **experience, share, process, generalize, and apply)** are discussed in this section.

Additional topics include:

1. learning styles and activities appropriate for each style;
2. a list of types of activities (with descriptions);
3. an activity design worksheet for facilitators; and
4. brief discussions on learning environments and delivery modes.

Ten population education sample activity sheets along with tips for facilitators working with youth and dealing with sensitive topics are included in the ***Addendum.***

PHASE III: IMPLEMENTATION

(7) Produce Curriculum Product

(8) Test and Revise Curriculum

(9) Recruit and Train Facilitators

(10) Implement Curriculum

(7) Produce Curriculum Product

Once the content and experiential methods have been agreed upon, the actual production of curriculum materials begins. This section includes: 1) suggestions for finding and evaluating existing materials; 2) evaluation criteria; and 3) suggestions for producing curriculum materials.

(8) Test and Revise Curriculum

This step includes suggestions to select test sites and conduct a formative evaluation of curriculum materials during the production phase. A sample evaluation form is provided.

(9) Recruit and Train Facilitators

It is a waste of resources to develop curriculum materials if adequate training is not provided for facilitators to implement it. Suggestions for recruiting appropriate facilitators are provided with a sample three-day training program.

(10) Implement Curriculum

Effective implementation of newly developed curriculum products is unlikely to occur without planning. Strategies to promote and use the curriculum are discussed in this step.

PHASE IV: EVALUATION AND REPORTING

(11) Design Evaluation Strategies

(12) Reporting and Securing Resources

(11) Design Evaluation Strategies

Evaluation is a phase in the curriculum development model as well as a specific step. Two types of evaluation, formative and

summative, are used during curriculum development. Formative evaluations are used during the needs assessment, product development, and testing steps. Summative evaluations are undertaken to measure and report on the outcomes of the curriculum. This step reviews evaluation strategies and suggests simple procedures to produce valid and reliable information. A series of questions are posed to guide the summative evaluation process and a sample evaluation format is suggested.

(12) Reporting and Securing Resources

The final element in an evaluation strategy is "delivering the pay off (i.e., getting the results into the hands of people who can use them). In this step, suggestions for what and how to report to key shareholders, especially funding and policy decision makers, are provided and a brief discussion on how to secure resources for additional programming.

4.2. NEED ASSESSMENT

Assessment is an integral part of instruction, as it determines whether or not the goals of education are being met. Assessment affects decisions about grades, placement, advancement, instructional needs, curriculum, and, in some cases, funding. Assessment inspires us to ask these hard questions: "Are we teaching what we think we are teaching?" "Are students learning what they are supposed to be learning?" "Is there a way to teach the subject better, thereby promoting better learning?"

Today's students need to know not only the basic reading and arithmetic skills, but also skills that will allow them to face a world that is continually changing. They must be able to think critically, to analyze, and to make inferences. Changes in the skills base and knowledge our students need require new learning goals; these new learning goals change the relationship between assessment and instruction. Teachers need to take an active role in making decisions about the purpose of assessment and the content that is being assessed.

Teacher Beverly Hoeltke goes over Key Learning's unconventional progress report -- which includes self-assessment -- with a student and his mother.

Grant Wiggins, a nationally recognized assessment expert, shared his thoughts on performance assessments, standardized tests, and more in an Edutopia.org interview. Read his answers to the following questions from the interview and reflect on his ideas:

- What distinction do you make between 'testing' and 'assessment'?
- Why is it important that teachers consider assessment before they begin planning lessons or projects?
- Standardized tests, such as the SAT, are used by schools as a predictor of a student's future success. Is this a valid use of these tests?

Do you agree with his statements? Why or why not? Discuss your opinions with your peers.

When assessment works best, it does the following:

Provides diagnostic feedback

- What is the student's knowledge base?
- What is the student's performance base?
- What are the student's needs?
- What has to be taught?

Helps educators set standards

- What performance demonstrates understanding?
- What performance demonstrates knowledge?
- What performance demonstrates mastery?

Evaluates progress

- How is the student doing?

- What teaching methods or approaches are most effective?
- What changes or modifications to a lesson are needed to help the student?

Relates to a student's progress

- What has the student learned?
- Can the student talk about the new knowledge?
- Can the student demonstrate and use the new skills in other projects?

Motivates Performance

For student self-evaluation:

- Now that I'm in charge of my learning, how am I doing?
- Now that I know how I'm doing, how can I do better?
- What else would I like to learn?

For teacher self-evaluation:

- What is working for the students?
- What can I do to help the students more?
- In what direction should we go next?

The general needs assessment is applied to targeted learners. What kind of doctor do we want to educate it depends mostly on social needs but it can reflect job opportunities, financial rewards and attitudes acquired during process of studding. Sometimes it is very difficult to make balance between these several needs. Needs can be obtained on different ways. It can be done through study of errors in practice. It is very difficult to design curriculum which will fully meet the needs of society and students. Following picture present the relation between needs of different subjects.

Expectations of society from graduate students are view from one perspective. For example, according to the European

Qualifications Framework graduate students should possess following performances:

- The descriptors
- Knowledge and understanding
- Application of knowledge and understanding
- Ability to making judgments
- Ability to communicate
- Learning skills
- Level depending on the cycle

If we ask students what they expect from their knowledge after graduation we will probably get another list of expectations.

Curriculum of medical faculties must be designed on the way which can provide performances after the student graduation asked from society but from student as well.

At the base of the general needs and needs of targeted learners should be made essential documents for every institution, the mission statement. Mission statement can include just generalized reasons for existing of institution, but it can be more concrete and include several aspects of student's knowledge like: theoretical knowledge, skills, performances etc.

The mission statement should partly give sort of picture, what kind of graduated student do we want. Involvement of the key subjects in process of curriculum development should be from the early stages of process of curriculum development, and one of the first steps is creation of mission statement of institution. All stakeholders of institution should be included in this process, and they all should give their view of the reasons why the institution exists.

4.3. FORMULATION OF AIMS, GOALS AND OBJECTIVES

Institution should define overall goals and aims for the curriculum. Specific measurable knowledge, skill or performance, attitude, and process objectives should be stated for

the curriculum. Learning goals and outputs for every course and subject should be compatible with mission of institution. It means that achieving of learning goals of different subjects and courses will lead to reaching mission of institution at the end of student studding process. Planning of new curriculum and reform of old one asks for defining of philosophy which is ` behind ` the curriculum and all its elements. Learning goal and outputs should also determinate the educational philosophy and institutional culture. So, mission of institution, educational philosophy and institutional culture are key elements of educational settings necessary for curriculum implementation.

An aim indicates the direction or orientation of a course in terms of its content. An aim is written in terms of level, teaching intentions and management of learning. The aims of the course encapsulate the purpose of the course and what the institution trying to do in providing the course. Aims are therefore more about teaching and the management of learning.

Learning Outcome is an expression of what a student will demonstrate on the successful completion of a course. Learning outcomes are related to the level of the learning; indicate the intended gain in knowledge and skills that a typical student will achieve and should be capable of being assessed. Learning outcomes are more about the learning that is actually to be achieved by the learner. Outcomes ten formulated as competences. The outcomes are coherent with the educational vision. These objectives make it also clear to the student what may be expected of the course.

The aims and learning outcomes of a course should determine the choice of teaching processes through which the module is presented. The teaching processes should be matched to the processes required of the student in attaining the intended learning outcomes of the course. Since a course will normally

have several intended outcomes, different components of the course will be suited to different teaching and learning processes, and such a course should be presented through a variety of appropriate methods.

Educational objectives are the end qualifications that are aimed to be reached by the student at the end of the study program. Curriculum is in continuous process of tuning objectives to the expectations of external actors (stakeholders) and internal actors (clients).

Tuning of curriculum and objectives clarifies which course subjects or which groups of subjects contribute to the different objectives.

- It is an instrument to make sound decisions for the learning environment.
- It is an instrument for evaluating subjects reliably.
- Students can derive from the objectives what they may expect from a study program; the list of objectives guides their studies.

Curriculum Aims:

- All students know what they need to achieve to succeed in life
- Staff and students have high expectations and strive for excellence
- Learning and teaching takes place in a safe and purposeful environment
- Students are encouraged to have enquiring minds and seek opportunities to become global citizens
- Staff challenge and support students' paths to success

Curriculum Objectives:

- Creative and flexible approaches to learning and teaching

- Offering an innovative curriculum developed with the aspirations and interests of the student at the centre
- Making effective use of ICT and new technologies to motivate and inspire students
- Nurturing close partnerships with local and international organisations, giving students a wide range of opportunities to experience the world of work
- Providing opportunities for students to extend their learning outside of the formal curriculum, including an entitlement to four hours per week of enrichment activities.

Goals provide guidelines and should be flexible to change ,if they are not appropriate. There are two bigger obstacles to formulating goals and objectives

Formulating Goals

Conceptualization of content, your beliefs, and your assessment of students' needs

- Example
- Four skills
- Knowledge
- Attitude

Formulating Objectives

- Communicate proposes what you want your students achieve and it outlines how to make them clear
- Guidelines to formulate goals
- Goals be generals, but not vague
- Goals should be transparent. Don't use jargon
- A course is successful and effective if the goal have been reaching
- Objectives should be more specific than goal. They are in a hierarchical
- Objectives should directly relate to the goals

- A clear goal and objective provide the basis for evaluation of the course (goals) and assessment of student learning (objectives).

4.4. SELECTION OF CONTENT

In many cases the formulation of content is seen as the starting point of curriculum development. Some analogies may help illustrate the limitations of this approach:

Beginning to build a house by buying the building materials. Once you have the materials, you ask an architect to do a design that uses the materials and then buy the land.

Planning a holiday by first packing your suitcase. Once you have packed, you then decide where to go, how to get there and what to do on your holiday based on what is in the suitcase.

Often the outcome of a 'content first' approach is a list of topics to be covered - content is equated with knowledge.

Content is more than just knowledge. Content selection needs to give appropriate balance to subject knowledge, process skills and the development of the student as learner as well as to detail and context.

It is more constructive to consider content in the context of assessment and learning outcomes.

The key questions then are:

- what knowledge (concepts, ideas, interpretations, applications) must/should/could be included to enable students to achieve the intended learning outcomes?
- what generic process knowledge and skills should the student have been taught by the end of the topic?
- what context in the discipline do the students need to have by the end of the topic?
- what is the appropriate balance of content: depth/breadth, knowledge/skills and processes/values?

- what content could contribute to the development of Graduate Qualities?
- owner that's not supported. Learn more about browsers you can use.

7 Criteria for the Selection of Subject-Matter or Content of the Curriculum:

The term curriculum is viewed in two different ways: the micro and the macro. The micro curriculum refers to subjects, while the macro curriculum refers to curricular programs. For example, the subject biology is a micro curriculum while BS in Civil Engineering is a macro curriculum.

What do the micro and the macro curriculum contain? The following criteria discuss the content of these two levels of the curriculum.

The 7 criteria below can be utilized in the selection of subject matter for micro curriculum, and for the content, subjects needed for the curricular program or course, of the macro curriculum.

1. Self-sufficiency

To help learners attain maximum self-sufficiency at the most economical manner is the main guiding principle for subject matter or content selection (Scheffler, 1970) as cited by Bilbao et al., (2008). Economy of learning refers to less teaching effort and less use of educational resources; but students gain more results. They are able to cope up with the learning outcomes effectively.

This means that students should be given chance to experiment, observe, and do field study. This allows them to learn independently.

With this principle in mind, I suggest that for a high school curriculum or preparatory year, there should be a one day

independent learning activity each week. However, this should be carefully planned by the teacher. When the students return, they should present outputs from the activity.

2. Significance

The subject matter or content is significant if it is selected and organized for the development of learning activities, skills, processes, and attitude. It also develops the three domains of learning namely the cognitive, affective and psychomotor skills, and considers the cultural aspects of the learners. Particularly, if your students come from different cultural backgrounds and races, the subject matter must be culture-sensitive.

In short, select a content or subject matter that can achieve the overall aim of the curriculum.

3. Validity

Validity refers to the authenticity of the subject matter or content you selected. Make sure that the topics are not obsolete.

For example, do not include typewriting as a skill to be learned by college students. It should be about the computer or Information Technology (IT).

Thus, there is a need to check regularly the subject matter or contents of the curriculum, and replace it if necessary. Do not wait for another 5 years in order to change it.

Modern curriculum experts are after current trends, relevance and authenticity of the curriculum; otherwise, your school or country will be left behind.

4. Interest

This criterion is true to learner-centered curriculum. Students learn best if the subject matter is meaningful to them. It becomes meaningful if they are interested in it. But if the curriculum is subject-centered, teachers have no choice but to finish the pacing schedule religiously and teach only what is in the book. This may somehow explain why many fail in the subject.

5. Utility

Another criterion is the usefulness of the content or subject matter. Students think that a subject matter or some subjects are not important to them. They view it useless. As a result, they don't study.

Here are the questions that students often ask: Will I need the subject in my job? Will it give meaning to my life? Will it develop my potentials? Will it solve my problem? Will it be part of the test? Will I have a passing mark if I learn it?

Students only value the subject matter or content if it is useful to them.

6. Learnability

The subject matter or content must be within the schema of the learners. It should be within their experiences. Teachers should apply theories on psychology of learning in order to know how subjects are presented, sequenced, and organized to maximize the learning capacity of the students.

7. Feasibility

It means that the subject matter can be fully implemented. It should consider the real situation of the school, the government, and the society, in general. Students must learn within the allowable time and the use of resources available. Do not give them a topic that is impossible to finish.

For example, you have only one week to finish the unit but then, the activities may take a month for the students to complete it. This is not feasible.

Do not offer a computer subject if there is no even electricity in the area or there are no computers at all.

Further, feasibility means that there should be teachers who are experts in that area. For example, do not offer English for Business Communication if there is no teacher to handle it.

Also, there is a need to consider the nature of the learners. The organization and design of the subject matter or content must be appropriate to the nature of students.

So, it would be better if students in a subject-centered curriculum (with pacing schedule that must be religiously implemented every week) be grouped homogenously; otherwise, many will flunk in that subject.

The application of an "objectives first" approach to the curriculum development process presents a wider, yet intrinsically specific, field of vision in the planning and implementing phase. A good analogy to this would be the "construction of a dream house", wherein the construction correlates to the development process and the dream house, symbolic of educational objectives (expected outcomes). The "objectives first approach" is similar to sitting down with an architect and renderer to produce the blue prints of the house (i.e. formulating objectives), then canvassing for and purchasing all the necessary building materials (i.e. selection and organization of content), and ultimately proceeding with the actual construction (i.e. selection and organization of learning experiences). In this manner, content is not limited to knowledge alone, and learner experiences are not singularly slated as mere activities in the classroom.

What follows then is the kind of content selection that is able to meet the overall needs of learners in a balanced and realistic manner, and is compliant with key selection criteria, namely: significance (the basic/ essential), validity (accuracy and how it relates to expected outcomes), relevance (social implications/ value), utility (usefulness and benefits), interest (will learners be interested?), and learnability (can it be learned). It must be noted that the curriculum is finite – time is both its great ally and inevitable opponent. Thus, the focus turns to scope and

sequence in organizing curriculum content, and the key here is to find the right balance of both within the limitations set by time, all the while putting in place integration and continuity of the selected content.

4.5. SELECTION AND ORGANIZATION OF LEARNING EXPERIENCES

Focus then turns to the selection and organization of learning experiences, in such a way that the selected content is injected into the learning environment in ways that promotes active learning, to accomplish set educational objectives. It must be noted that as objective formulation and content selection is subject to crucial standards, so is the process of selecting and organizing learning experiences. Learning interactions in the classroom are dependent on several important points – consistency with objectives (stated outcomes), learner appropriateness, resources, constraints, and the learning site. Once these are clarified, more questions arise and necessary decisions need to be made in terms of the appropriateness, attainability, sequence and combinations of teaching-learning activities and interactions.

Considering the interrelatedness of objectives formulation, selection and organization of content, as well as the selection and organization of learning experiences, it is clear that there is no one approach or model to adapt in the development process. What stands out are the similarities and interplays of elements within the components themselves, the implied complexities and considerations to take into account, as well as the multiple roles played by curriculum developers, planners and other stakeholders. Further emphasized is the “Learner”, who remains the center and core beneficiary of a curriculum development process that should be ideally equitable and aligned with the needs of each individual, invested in the endeavor.

SELF ASSESSMENT 1

Outline the stages to be followed in the process of designing a school Curriculum.

Possible answers to this activity are provided at the end of this unit

Finding Content

- **Check in your department for past syllabi** if you are offering a pre-existing course. Also be sure to check your institution's course calendar and read the course description to ensure that your course meets that stated description.
- **Locate similar courses at other institutions** if your course is new (or you would like some new ideas). Talk to your colleagues in your discipline area or go to the Web to find courses.
- **Review textbooks in your discipline area.** This can be a very easy way to locate not only possible content to cover but also ready-made organizational structures. Publishers will send out texts for you to review. Keep your students in mind when choosing texts – not only their abilities and past experience with the topic areas but also their time limitations.
- **If texts are not available or not appropriate, you may need to create a reading package or course notes.** It will take more time to compile this type of resource, so set aside a few months for this activity. Also, be sure to factor in the time that may be needed to receive copyright clearance for copying and selling published materials. Your institution may have a copyright agreement which makes this less of an issue, but be sure to investigate what is possible in advance so you avoid basing part of your course on materials that you cannot easily secure for the students.

Selecting Content

Set some type of criteria to help select appropriate content for your course. Course design literature suggests the following criteria. Course content should:

- ❖ Fit with your course learning goals
- ❖ Have importance in the discipline
- ❖ Be based on or related to research
- ❖ Appeal to student interests
- ❖ Not overlap excessively with student past experience or knowledge
- ❖ Be multi-functional (help teach more than one concept, skill, or problem)
- ❖ Stimulate search for meaning
- ❖ Encourage further investigation
- ❖ Show interrelationships amongst concepts

4.6. ORGANIZATION OF CONTENT

Many variations on concept mapping techniques exist to help you decide on an organizational structure for your content. The key idea is to name, in a word or two, the major topics or concepts for your course, then try to visually place them on the page. You can use a hierarchical approach or put the concept in the centre of the page and work out from there. Put the words into boxes or bubbles and connect them with lines or arrows to show how the material connects. You may also want to put verbs on the connectors to clarify the relationships between ideas. For an even more flexible approach, try using an index card or sticky note for each concept, instead of boxes on one sheet of paper, and physically move them around until you see an organization that makes sense. For more linear thinkers, creating lists of headings and subheadings is equally effective.

Some suggestions for ordering the topics or concepts include:

- **Topic by topic** – There are no set relationships amongst the topics, so the ordering is not critical. This works well for courses that revolve around current issues, for example.
- **Chronological** – Moving from past to present is a very common and easy to implement organizational pattern.
- **Causal** – The course presents a number of events or issues that culminate in some final effect or solution.
- **Cumulative** – Each concept builds on the previous one(s).
- **Problem-centred** – Problems, questions, or cases represent the principal organizing features of the course.
- **Spiral** – Key topics or concepts are revisited throughout the course, with new information or insight developing each time.

Within each class, also consider how to organize your material so that students can both learn and retain it. Different philosophies of learning are represented. Some ideas to consider are:

- **Start with what students already know** and then move to the abstract model or theory.
- **Start with concrete examples,** such as cases, news items, or other real-world situations, then generate the abstract concepts.
- **Start with a solution, conclusion, or model** and work backwards to the question.
- **Give students time to reflect,** individually or through discussion, on what and how they are learning.
- **Build in practice time**, with feedback, either in class or on assignments so that students learn to work with the concepts and can receive assistance with problem areas.

4.7. THE RELATIONSHIP BETWEEN CURRICULUM CONTENT AND LEARNING EXPERIENCE

Curriculum content and learning experience are great concepts in the development process of a curriculum. In order for the curriculum developers to achieve the aims goals and objectives these two concepts must be properly selected and organized. I will say the curriculum content is the base form, the step by step process or strategy the teacher adopts or follows to enable the learners have a great and positive experience.

The learning experience on the other hand explains if the content of the curriculum has been actualize criteria for furthermore, in the selection of learning experience and curriculum content there are similar points like validity and interest and also their organization and integration is based on the same relationship (vertical and horizontal) and criteria (continuity, sequence and integration).

Conclusively, curriculum content and learning experience are related in the area of goal achievement, selection, organization and integration.

4.8. EVALUATION OF CURRICULUM CONTENT

Evaluation in curriculum development is an attempt to find out if the content and learning experiences selected and organized for a group have helped in the achievement of the objectives. Teachers, learners and curriculum experts are concerned about whether learning has actually taken place or not. For this reason, curriculum experts had to concern themselves with the identification of the means of determining both quality and quantity of learning.

Evaluation of curriculum content helps the developers, teachers and even the learners in carrying out the following task.

1. To check the validity of the hypotheses upon which the curriculum has been based
2. To expose the weakness and strength of an educational programme through the achievement of learners in the programmes
3. Gain information on the various performances of learners, adjust the teaching methods, techniques and provide more resources for teaching/learning.
4. Provide adequate data for teachers to report on. This data can be collected by the use of evaluation instruments such as tests, projects, interviews, rating scales, check lists, assignments, questionnaires and socio metrics test.

Self-Assessment 2

Why is it necessary to base evaluation on the objectives identified in the scheme of work?

Possible answers to this activity are provided at the end of this unit.

Conclusion

Teachers in elementary and high school are not directly involved in the selection of subject-matter because there are already lesson plans made by the Department of Education. All they have to do is to follow it. However, they can also customize the lessons if their department heads or principals will allow them.

As regards macro curriculum, the Commission on Higher Education sets guidelines and policies on what subjects should be offered as minimum requirements for the course. Then, the Curriculum Development Committee will take charge of the selection, organization and implementation of the curriculum with the approval of the Academic Council.

Practice Activity

Your colleagues want to know more about government resource allocation to schools. What would you include in your presentation?

Suggested answers to this activity are provided at the end of this unit.

Summary

This unit dealt with the concept of resource allocation in the realisation of national and school curriculum goals. It began by defining the concept and then identified the types of resources central governments allocate to the Ministries of Education. Other sources of educational resources were also identified and discussed. The unit stressed that students are the final consumers or beneficiaries of the resources allocated. Teachers were identified as the resource that translates the intended goals into reality through the teaching and learning process.

Reflection

Reflect on the role you can play to ensure the effective and efficient management of resources in your school.

Unit Test

1. What are the resources that teachers can contribute to the education system?
2. How can local authorities help schools to obtain educational resources?
3. Why are educational resources always seen by consumers or users as inadequate?
4. Possible answers to these questions are provided at the end of this unit.

SUGGESTED ANSWERS

Self-Assessment 1

Your answer to this activity should include the following points in the sequence in which they are presented.

- ❖ Needs diagnosis/social factor assessment
- ❖ Objectives formulation/describing the outcomes
- ❖ Content selection
- ❖ Content organisation
- ❖ Selection of learning experiences
- ❖ Organisation of learning experiences
- ❖ Evaluation.

Self-Assessment 2

It is necessary to base evaluation on the objectives in order to determine whether learners have acquired the expected knowledge or behaviour, or whether changes in the course content, materials or teaching strategies are necessary.

Practice Activity

In the presentation, you could include the following:

- ❖ financial resources
- ❖ human resources
  - teachers
  - supervisors
  - administrators
- ❖ material resources
  - tutorial facilities or buildings
  - equipment
  - vehicles.

Unit Test

1. Teachers can contribute knowledge, skills and time.
2. The local authorities can generate their own resources and allocate them to the schools. Local authorities frequently allocate land for buildings and playgrounds, as well as funds to build classrooms.
3. From a consumer's viewpoint, educational resources are never adequate because:

- they do not meet the demands and needs of the consumer;
- the central government has to allocate money to other Ministries, such as Health and Defence;
- parents continue to pay fees related to schooling, and these fees continue to rise; and
- available resources may not be efficiently managed.

UNIT 5

MODELS OF CURRICULUM DEVELOPMENT

Introduction

There is increasing interest amongst university teachers in all components of the curriculum process rather than just for the content of a course of study. One way of developing a curriculum plan is through modelling. Models are essentially patterns that serve as guidelines to action. Models can be found for almost every form of educational activity. The education profession has models of administration of supervision, of instruction, of evaluation and others. There are models of curriculum development as well.

Objectives

After completing this unit, you should be able to:

1. Discuss various models of curriculum design.
2. Compare curriculum models.
3. Explain types of curriculum in relation to models of curriculum.

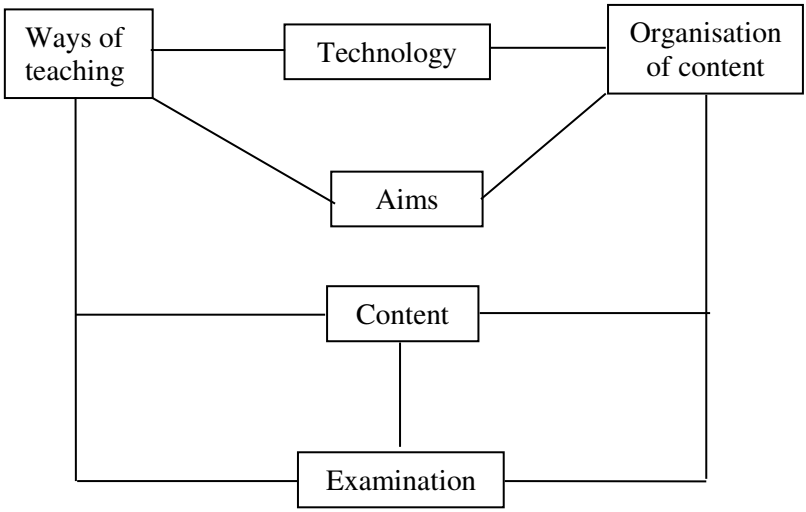
Content

This unit covers the following models of curriculum design:

- Tyler's model,
- Hilda Taba's model
- Saylor and Alexander's model.
- Kohl and Holt 's model
- Roger's model

"A simplified representation of reality which is often depicted in diagrammatic form".

A simple curriculum model



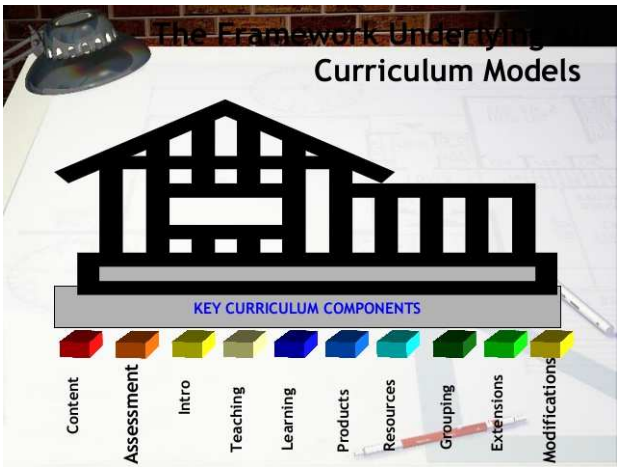
- Models serve as guideline to action
- Models are found in almost every form of education.
- The education profession has models of instruction, of administration, of supervision etc.
- In curriculum, there are models of curriculum as opposed to models of curriculum development.

TECHNICAL SCIENTIFIC MODELS

- Presents blueprint that includes goals, objectives and step by step sequencing of content, activities and learning outcomes.
- Use instruments and empirical methods in orderly sequenced procedures and quality control measures to increase the probability of success in its implementation.
- Highly objective, universal and logical
- Reality can be defined and represented in symbolic form.
- Specified and addressed in linear form.
- Rest in belief in rationality, objectivity and certainly.

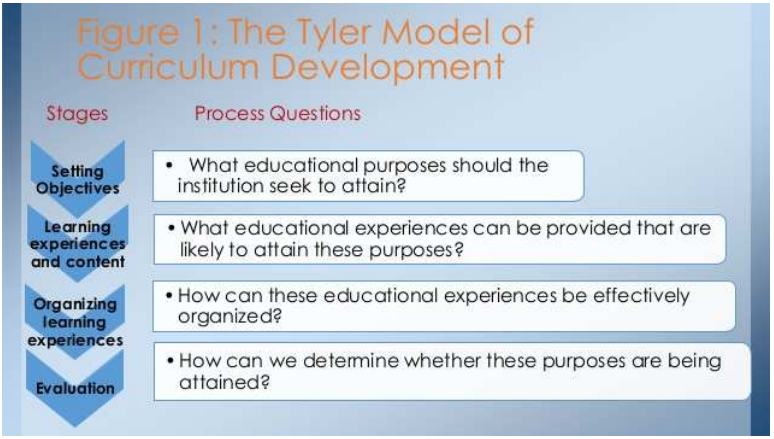
NON TECHNICAL – NON SCIENTIFIC MODELS

- This approach considers that the curriculum evolves rather than being planned precisely.
- Subject matter has importance only if student can find meaning in it for himself or herself.
- Subjective, personal, aesthetic, heuristic and transactional.
- Stress on learner rather than output.
- Emphasizing activity oriented approaches to learning.
- Curriculum should evolve rather than precisely planned.



5.1. TYLER'S MODEL:

Ralph W. Tyler, born 1902 in Chicago, raised in Nebraska at age 19, switches from Medicine to Education after being "hooked on teaching" in South Dakota .For his masters, in 1923, he proposes the following question: "What were they trying to teach the children, how to memorize or to understand and use the material?"



One of the models which are still known to be applicable in present century is the one published by Ralph Tyler in 1949. He stated his curriculum rational in terms of four questions based on educational purpose, essentiality of educational purposes, organization of educational experiences, and effective attainment of those purposes; these should be considered while developing any curriculum.

Sources of objectives

We could find, in the first stage, the curriculum developers need to select and identify educational objectives based on three sources: students, society, and subject matter. The needs of students and community or national society are examined from various points of views such as: occupational, psychological, recreational, health, family, religion and civic roles. Subject

matter, being another source, curriculum developers looks at the subjects that are in question to be taught.

These speculative objectives from the three sources are then filtered through two screens: the schools philosophy and knowledge of the psychology of learning, in order to finalize a set of educational objectives.

After the completion of stating and refining objectives, the rational proceeds through the steps of selection and organization of learning experiences as the means of achieving outcomes.

The final step in Tyler's rational; evaluation is the process of examining vitality placed by the curriculum to those finalised educational objectives. Because the statement of objectives not only serves as the basis for selecting and organizing the learning experiences, but also serves as a standard against which the programme of curriculum instruction is appraised.

Outcome of the model

1. What educational purposes should the school seek to attain?
   - ❖ Studies of the Learners Themselves as a Source of Educational Objectives
   - ❖ Studies of Contemporary Life outside the School
   - ❖ Suggestions about Objectives from Subject Specialists
   - ❖ The Use of Philosophy in Selecting Objectives
   - ❖ The Use of a Psychology of Learning in Selecting Objectives
   - ❖ Stating Objectives in a Form to be Helpful in Selecting Learning Experiences and in Guiding Teaching
2. How can Learning Experiences be selected? Which are likely to be useful in attaining these objectives?

- ❖ Meaning of the Term “Learning Experience”
- ❖ General Principles in Selecting Learning Experiences
- ❖ Illustrations of the Characteristics of Learning Experiences Useful in Attaining Various **Types of Objectives**

3. How Can Learning Experiences Be Organized for Effective Instruction?
   - ❖ What is meant by "Organization?"
   - ❖ Criteria for Effective Organization
   - ❖ Elements to be organized
   - ❖ Organizing Principles
   - ❖ The Organizing Structure
   - ❖ The Process of Planning a Unit of Organization
4. How Can the Effectiveness of Learning Experiences Be Evaluated?
   - ❖ The Need for Evaluation
   - ❖ Basic Notions Regarding Evaluation
   - ❖ Evaluation Procedures
   - ❖ Using the Results of Evaluation
   - ❖ Other Values and Uses of Evaluation Procedures

Criticism of the Tyler Model:

Narrowly interpreted objectives (acceptable verbs) Difficult and time consuming construction of behavioral objectives Curriculum restricted to a constricted range of student skills and knowledge critical thinking, problem solving and value acquiring processes cannot be plainly declared in behavioral objectives (Prideaux, 2003).

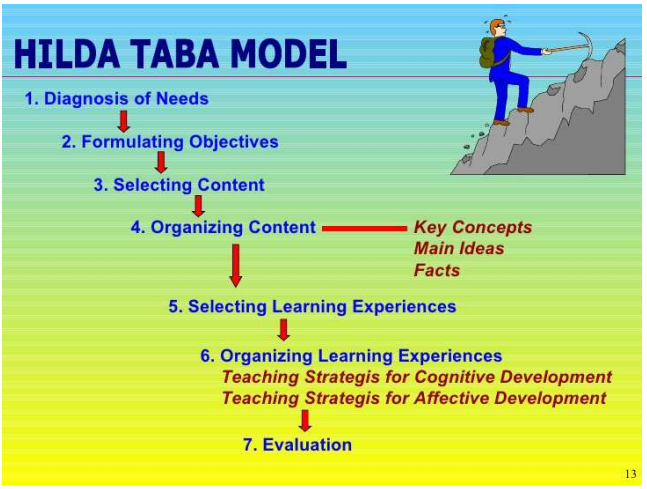
5.2. HILDA TABA

Hilda Taba (7 December 1902 – 6 July 1967) was an architect, a curriculum theorist, a curriculum reformer, and a teacher educator. Taba was born in a small village in south-eastern Estonia. Taba was introduced to Progressive education ideas at Tartu University by her philosophy professors. Taba was a student of John Dewey; she wrote a book entitled Curriculum Development: Theory and Practice (1962).

Taba's approach is based on the behavioral approach to curriculum design. It is based on a step by step plan, with

specific goals and objectives with activities that coincide and are evaluated with the stated objectives. Taba developed a process for determining what needs to be taught to students and included a guide on how to accomplish the outcomes from students (Costa and Loveall, 2002). Hilda Taba believed that there must be a process for evaluating student achievement of content after the content standards have been established and implemented. The main concept of this approach to curriculum development is that teachers must be involved in the development of the curriculum. She believed that the curriculum should be organized around generlized learning objectives which enables students to discover principles that will enable them to be successfully

There are seven major steps for developing a "grassroots approach to curriculum development. These steps are: 1) diagnosos the needs of the students; 2) teacher defines objectives to be taught; 3) objectives and content should match; 4) the content is sequenced according to learner's interest, achievement level; 5)instructional methods must keep students engaged; 6) learning activities are organized, remembering the students being taught; and 7)students and teachers involved in evaluation procedures.



Self-Assessment 1

What is the difference between the objectives model and the process model of curriculum design?

Possible answers to this activity are provided at the end of this unit.

Strengths of Taba Model

- ❖ Gives teachers a greater role by not just making them implementers of the curriculum but also developers.
- ❖ Uses the inductive method.
- ❖ Teacher approach is used.
- ❖ Notes that teachers are aware of the students' needs therefore they are the ones that should develop the curriculum.
- ❖ Sees curriculum as a "plan for learning".
- ❖ Gives importance to objectives in order to establish a sense of purpose for deciding what to include, exclude and emphasize in a curriculum.

Application of the Taba Model

- ❖ The model is currently uses today most curriculum design:
- ❖ The steps still used are:
    1. Identifying the needs of the students
    2. Developing objectives
    3. Selection instructional methods
    4. Organizing learning experiences
    5. Evaluating

Some of Tab's Philosophical ideas on curriculum development

Social processes, including the socialization of human beings, are not linear, and they cannot be modelled through linear planning. In other words, learning and development of

personality cannot be considered as one-way processes of establishing educational aims and deriving specific objectives from an ideal of education proclaimed or imagined by some authority. The reconstruction of curricula and programmes is not a short-term effort but a long process lasting for years.

Social institutions, among them school curricula and programmes, are more likely to be effectively rearranged if, instead of the common way of administrative reorganizaiton – from top to bottom a well-founded and co-ordinated system of development from bottom to top can be used. The development of new curricula and programmes is more effective if it is based on the principles of democratic guidance and on the well-founded distribution of work. The emphasis is on the partnership based on competence, and not on administration.

5.3. SAYLOR, ALEXANDER AND LEWIS MODEL

This model may be placed in the "means ends" group. "The classical model (like Tyler, Beauchamp, and Saylor and associates), in contrast, is a means-end model. It assumes a desired end (goals and objectives), a means of attaining this end (learning experiences), and a process (evaluation) for determining whether the means in fact has resulted in the desired end." (Livenburg, 2011)

This model has five components for evaluation. This model comes closest to the actual program activities that were initiated by the planning committee for this curric. This curriculum was adapted from two successful models at other Colleges. Program features were adjusted to meet local planning considerations. These are from Olivia:

1. The goals, sub-goals, and objectives. Goals: (using Olvia, p.437) Analysis of the needs of society. The Associate Faculty Development Institute (AFDI) provides the structure and incentives to foster the knowledge, skills, and values of adjunct

faculty in ways that leads directly to increased student degree completion and learning outcomes, as described by the Accelerating Greatness 2013 Strategic Plan. The AFDI is also a way to recognize and reward adjunct faculty who commit to the goals of Ivy Tech as expressed by Accelerating Greatness 2013 Strategic Plan. (College, AFDI, 2011)The goal expresses the colleges understanding of its role in a free society and its responsibility to provide training for adjunct faculty to meet the needs of students taking courses of study at the College. They include an analysis of the needs of society and the individual and also address the needs of local and state-wide stakeholders. Sub-Goals: Needs of the Individual (Student and Adjunct Faculty) 1. Increase the completion rate of students enrolled at the college to that of the college's cohort. 2. Increase the teaching skills of the adjunct faculty in the five core areas that have been identified on the 2011 CCSSE Community College survey of Student Engagement. Objectives: 1. Build a common core of teaching courses for the adjunct faculty of the college.

2. The program of education as a totality. This program of studies is intended to address the problems that have been known to exist but due to limitations on staff, and lack of funding, have not yet been addressed. The need to formulate a comprehensive plan as well as attracting potential stakeholders to invest in the program has caused the College to look at several other programs that have been developed by other community colleges to address these same issues. Two programs that were used as models were, the Valencia Community College.

3. The specific segments of the education program. The program of studies consists of two parts, thirty hours of core courses and 30 hours of elective courses. The courses may consist of lectures, group discussions around a common theme, focused instruction on a particular subject area, i.e. like math, higher order thinking, writing etc.

4. Instruction. Instruction will vary with the presenter. Presenters will have developed an instructional proposal that is consistent with the segment of instruction that they are supposed to teach. The effectiveness of the instruction will be evaluated through the comments of the participants on a course evaluation form and from mapping the areas covered against the CCSSE areas so that coverage of these areas is covered and linkage can be made to the responses made by students and faculty on the CCSSE annual evaluation.

5. Evaluation program. As described above, the evaluation program will consist of both internal and external evaluation. The Internal components shall consist of 1. A teacher survey which will be completed upon the completion of each course taken from the institutes curriculum. 2. A survey that will be completed by students which will ask the rate elements that will be taken from the five elements of student engagement. The expectation is that teachers who have taken or are taking courses at the ADFI will cause an increase in student engagement and a increase in student retention and graduation rates. The external evaluation components will consist of the yearly CCSSE survey of faculty and students. The improvement of student engagement in the areas listed on the CCSSE survey will be the primary measurement of the success of the program.

Evaluation of the Total Program (Olvia, p.441) as mentioned before the success of the Faculty Development program will be evaluated primarily on the percent of students that show improvement in the areas of student engagement which it is hoped will lead to increased student graduation rates for the College. This may be thought of as a rather narrow focus to totally define student and school success. It may be better to not only focus on student success factors, but also teacher success factors. The null curriculum would be the message that other factors of learning, which are not measured do not count toward the total success of the program.

Self-Assessment 2

Define a terminal objective and an enabling objective.

Possible answers to this activity are provided at the end of this unit.

5.4. HERBERT R. KOHL

Herbert R.Kohl was born on August 22, 1937 is an educator best known for his advocacy of progressive alternative education and as the author of more than thirty books on education He founded the 1960s Open School movement and is credited with coining the term "open classroom."

The Open Classroom Movement in 1970's, The British Influence was organized by A.S.Neill and Summerhill. The British Infant Schools was organized by Joseph Featherstone, Alternative Schools and Free schools.

5.5. JOHN HOLT

John Holt advocates of child centered progressive education. He mentioned about how children fail. Children are subject peoples. School for them is a kind of jail. Do they not, to some extent, escape and frustrate the relentless, insatiable pressure of their elders by withdrawing the most intelligent and creative parts of their minds from the scene? In this not at least a partial explanation of the extraordinary stupidity that otherwise bright children so often show in schools? The stubborn and dogged "I don't get it" with which they meet the instructions and explanations of their teachers-may it not be a statement of resistance as well as one of panic and flight?.

An open classroom is different. Pupils are free to choose and change their seats. So is the teacher. When disputes arise they must be adjudicated and finally settled with all parties involved. If two people want the same seat they must settle it with each other and with the teacher and with other pupils. There is, of

course, no formula for resolving all conflicts. It is a matter of learning how to bargain and compromise. But one must make sure that an authoritarian structure controlled by pupils does not replace the one the teacher has refused to impose. This is a difficult and delicate matter.

Yet a classroom can become more democratic. People can come to listen to each other and care about each other's thoughts and feelings. It takes patience, and a belief in the potential of the children. Time must be taken, especially in the beginning of the school year, to work out disputes over seating and other seemingly petty things like hanging up coats, lining up, and going in and out of the school building. When these are done without specific directions and without imposing sanctions against offenders, some disputes are bound to arise. That is the price of developing a democratic classroom where pupils and teacher find ways of functioning together without invoking arbitrary or absolute authority.

5.6. ROGERS MODEL

Carl Roger

Born on Jan 8th 1902 in Chicago, USA. After some practical experience in the field of psychology, he developed this model which is also known as model of interpersonal relations.

❖ **Formative Tendency**

The evaluation occurs in step by step process, from simple to complex. Human consciousness evolves from primitive unconsciousness to highly organized awareness.

❖ **Actualizing Tendency**

It is a tendency in humans to move towards completion and fulfilment of potentials. Individuals have the inner power to creativity, to change the self-concept. The source of psychological growth and maturity resides within individuals and is not found in other forces.

❖ **Self concept**

It is the collection of information, ideas, attitude and belief we have about ourselves. If self concept becomes strong it becomes difficult to be changed easily.

❖ **Human nature**

According to Roger that humans have inner drive towards self fulfilment and maturity, so educator and therapist to provide good environment and help.

Educational Implications

- ❖ Rich educational environment
- ❖ Educator as a facilitator.
- ❖ Positive educator-learner relationship.
- ❖ Curriculum must be new and modern.
- ❖ Educator must be an active listener.
- ❖ Nurturing learners.
- ❖ Experience is the highest authority.

Conclusion

Education is not simply a bottom-line phenomenon. Thus the effectiveness of curricula depends not only on a simple average or accumulation of effects across test takers, but on a careful assessment of the distribution of effects across grades and topics, across subgroups over time, and across the myriad of unique regional variations of our nation. Implementation, for its part, is not achieved by a blind execution of procedures, but rather by the development of a community of practitioners competently prepared to make appropriate use of materials and exercise judgment in their use.

Furthermore, curriculum design is not a rigid scripting of a scope and sequence, but the presentation of sets of tasks and instructional materials linked to relevant standards that can engage students, build on their previous knowledge, and assist them in gaining the mental discipline and proficiency required of

knowledgeable citizens and world-class scholars. Effectiveness should consider all these factors, in terms of both potential impact and associated opportunities and risks, and transform them into a judgment concerning a curricular program.

Summary

The curriculum 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.

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.

Reflection

As a practising teacher, on which model or models of curriculum design do you think your national school curriculum was based? How does the model affect what you actually teach in class?

Unit Test

List the stages in the task analysis process that you need to follow when designing a curriculum. Possible answers to this test are provided at the end of this unit.

Suggested Answers

Self-Assessment 1

The differences between the objectives and process models are outlined below.

- The objectives model derives content and methodology from objectives, whereas the process model derives content and methodology from curriculum aim.
- The evaluation results in the objectives model improve and influence all stages, including the curriculum idea, objectives, content, material and methodology. In the process model, the evaluation is conducted on the outcomes and influences curriculum goals.

Self-Assessment 2

Below are possible definitions for terminal and enabling objectives.

Terminal objective: Statement of what the learner should be able to achieve at the conclusion of a unit of instruction.

Enabling objective: The sub-objectives of a terminal objective which will make it possible for a learner to arrive at the terminal behaviour.

Unit Test

Your answer may take the form below.

The eight stages which one has to go through in a task analysis process are:

- Establish or obtain general goals of education.
- Reduce the general goals to specific instructional objectives, including objectives for different domains andlevels.
- Assess prior student knowledge and/or abilities.
- Break learning into small, sequential steps.
- Identify teacher behaviour.
- Identify student behaviour.
- Write a description of the lesson to be delivered.
- Evaluate to determine if the intended outcomes have been achieved.

UNIT 6

APPROACHES OF CURRICULUM DESIGN

Introduction

In Unit 5, you learned models of curriculum development and how educational resources are allocated to Ministries of Education by central governments for the purpose of implementing national educational goals. We also explained how the school can mobilise resources at its disposal in order to translate curriculum objectives into teaching and learning experiences. The teacher's personal contribution to resource allocation was briefly discussed in Unit 5.

This unit will take you through a very familiar area. We will discuss teaching methodologies, which are the methods teachers use to deliver their lessons.

Objectives

After completing this unit, you should be able to:

1. Define the subject centered designs
2. Explaining the learner centered designs.
3. Describing the experience centered designs.

4. Determine the conditions in problem centered designs successfully.

Content

This unit will cover the following topics:

1. subject centered designs
2. learner centered designs.
3. problem centered designs

Curriculum design is the arrangement of the components of elements of a curriculum which may also be referred to as curriculum organisation? It is the nature of elements present in a curriculum and the patterns or organisation in which they are brought together.

According to Saylor and Alexander (1974) design is the element that makes a difference between one curriculum from another. This is because it is a particular shape, framework or pattern of learning opportunities; thus for any particular population, these scope and type if learning opportunities identifies a curriculum design.

6.1. APPROACHES OF CURRICULUM DESIGN

Curriculum design is about how a person envisions what a curriculum should be. There are several standard models of curriculum design. Even the text book writers or instructional material producers have different curriculum approaches.

Curriculum is intimately related with all aspects of education. While education is a developmental process towards a converted goal, curriculum is the input goal oriented direction to that process curriculum is the plan for guiding the goal – oriented educative process.

After topics have been selected according to the relevant fundamental principles described above, they have to be systematically arranged so as to facilitate meaning full and

effective transaction. The content show is arranged in a systematic manner. In order to realize the objective it is inevitable to organize the curriculum in the most psychological and logically coherent manner. Different approaches for organizing the curriculum. They are spiral, topical, concentric, a unit approach.

Since the opportunities are difficult to provide at once and since they lack the permanent structure of a building or the texture and the colour of a dress the design is not usually visualized rapidly. The key features of curriculum designs are:

a) Their pattern of content organization
b) Activities organization
c) Areas of living organization

However, the most prominent feature of curriculum is its pattern of content organization. This is because we cannot deny that content or subject matter is an important element in the curriculum design. However, all the activities and experiences that go along with them must be purposeful. Curriculum designers must have the following at the back of their minds; score, sequence, continuity and integration to have a good design at the end of the day. Curriculum design may be considered along;

1) Subject centered design
2) learner centered design and
3) problem centered design (Udoh, 1992).

6.1.1. SUBJECT CENTERED DESIGNS

One of the most prominent is the subject-centered design.

The subject-centered designer divides the curriculum into nice and neat subjects such as math, science, history, literature, etc. This structuring of the disciplines is for practical reasons. It organizes the curriculum into basic concepts that are combined

based on what they have in common. The essential knowledge of each area is gathered together to be taught to students.

Where the division of the curriculum stops depends on its purpose. Any expert in education knows that subjects overlap and the division is often arbitrary. In addition, every subject can be further divide into smaller parts. For example, English can be broken down into writing, reading, speech, grammar, and more.

A major criticism of this design is the lack of integration or horizontal articulation. The learning is compartmentalized and the students often never see the connections across subjects. In addition, the subject-centered design does not take into account the needs and interest of the students. The textbook is made by experts in the field who already know what knowledge and even experiences a child requires.

Despite this, the subject design is by far the most popular approach. It is easy to do and practical. Its appropriateness needs to be left to the educator who is trying to help their students.

Subject matter is the most used and accepted curriculum Design, it is also the oldest curriculum Design. We see the earliest example in the medieval era in the Middle Ages the monastery and Cathedrals and the organizations of the seven liberal arts in the schools of ancient Greece and Rome.

6.1.2. THE SUBJECT DESIGN

It is traditional since most schools organize their curriculum along this design. Majority of teachers passed through this in their schools especially at primary and post primary levels and they find it difficult to change.

Nicholls and Nicholls (1978) wrote that in vast majority of schools, the curriculum is organized on a subject basis, but teachers may hold different views about the value of subject-matter. In this design, the curriculum is organized into a variable

number of subjects each of which represents a unique and homogeneous body of content.

Since there is knowledge explosion, men have sought to classify knowledge in order to facilitate study and research, but they seldom do so with the thought of teaching others. Attempts to deal with the quantitative aspects of the environment, for example, led to the discovery of many facts as well as principles which we regard as mathematics and when it grew out of practical need of man for number, knowledge relationship and a way to describe them we label it subject, while classics was described for culture. Other names for this design are, the separate-subject curriculum, subject matter curriculum and the scientific subjects curriculum. This design is common in primary and secondary schools.

Here, subjects are made to study bits of each subject in each school day and little regard is paid to the interrelationship of the school subjects. For example, teaching health education or science is taught without reference to family living, physical education, home economics and agricultural science i.e. health science is taught as a separate subject by itself.

Assumptions

i) The acceptance of the Brunerian contention that a child's cognitive functioning is essentially the same as the adult scholar, it differs in matter of degree.

ii) The belief that the major role of the school is to transmit the cultural heritage from generation to generation and that most signification parts of the heritage can be grouped into parts, or "subjects".

iii) The belief or notion that each subject has an internal order which can be presented from simple to complex.

iv) The assumption that this organization is such that will enable the students to develop the capacity to deal with the culture as he/she meets it.

v) That an authoritarian presentation is superior to a democratic approach.

vi) The belief that this pattern has stood the test of time and hence has merit. It provides security for the teacher, the learner and the parents because of its time-honoured status.

Characteristics

i) Learning a subject is based upon language activities-talking, listening, writing, and reading. Hence, it is expository in nature.

ii) Adults select and organize the content before it is presented to the learners.

iii) The content is universally true and hence is not affected by the local situation.

iv) Each subject is in its own "a compartment" with little genuine concern for things outside its walls.

v) Emphasis is on the processes of absorption and memorization. Methodology will include considerable drill to establish the content in the learners mind.

Advantages

i) Since it is systematically arranged, it is an effective organization for bequeathing the important societal cultural heritage on the learners i.e. youths.

ii) As stated before, most teachers passed through this type of design, as a result it will make their jobs easier.

iii) It is acceptable by parents since they also passed through it.

iv) It organization from simple to complex makes it easy to administer.

Disadvantages

i) Due to knowledge explosion, there is an increase in fragmentation of knowledge and adding of more subjects to the school offerings. This makes the teachers to be less confident in their ability to handle the subject. To give attention to different subjects, it means the school's day time will be broken down the more.

ii) There is little or no regard for individual differences among learners and it seems it is detached from happenings in the real world.

iii) The misconception about the subject-centered approach s that learning the information presented will eventually transfer to life situations which some psychologists have about, serious doubt as the likelihood or transfer of learning when knowledge is broken down into discrete parts.

iv) In most cases, the interest of the learner is not taken into consideration which is against the psychological stand that learners' interest affects learning.

v) Rote memorization is encouraged rather than the process of thinking and as a result it is not an efficient arrangement of the curriculum for learning and use.

vi) It encourages passive learning and structured knowledge.

Subject Design-Strengths and Weaknesses

- ❖ Emphasis on verbal activities
- ❖ Introduces students to the essential knowledge of society
- ❖ Easy to deliver
- ❖ Traditional
- ❖ Prevents individualization
- ❖ Disempowers students
- ❖ Fails to foster social, psychological, and physical development
- ❖ Compartmentalizes learning
- ❖ Neglects students' needs, interests, experiences
- ❖ Fosters passivity

Self-Assessment 1

Based on what you already know about cognitive, psychomotor and affective learning outcomes, list two teaching methodologies that may be best to teach each of the following topics:

1. knowledge about the environment
2. how extreme heat and flooding affect the environment
3. the construction of a house
4. the cultural beliefs of a group within the community
5. the effect of technology on society

Possible answers to this activity are provided at the end of this unit.

6.1.3. THE DISCIPLINE DESIGN

This is the arrangement of organized knowledge for instruction by men of knowledge that command respect among academic colleagues and possess authority in their fields of endeavour. It is considered to be one of the traditional academic areas of inquiry and commonly used in higher or tertiary institutions like colleges of education, polytechnics and universities. Hence we have disciplines like physical education, health education, mathematics, economics, chemistry, geography, philosophy, psychology, agriculture etc.

Advantages

i) It is more systematic and effectively organized than the subject designer in the transmission of societal cultural heritage.
ii) It gives room for rational thinking on the part of the learner.

Disadvantages

i) There is still problem of non integration of knowledge since the learners are presented with “bit by bit” curriculum.
ii) Interest and experiences of learners are inadequately taken care of.

iii) It is more academic and intellectual in nature and as such not an efficient way for learning and use.

Generally, on knowledge and disciples Lawton (1975) wrote that to answer "Why disciples, or why different forms of knowledge?" four answers may be examined:

a) Disciplines justified in terms of the nature of reality, to him, a native realist point of view is that world exists 'out there' with certain fixed characteristics, and man's search for knowledge is a simple cumulative process of gradually uncovering more and more of "Nature's Secrets".

This might be described as the man-in the street or common sense of view of reality. Many scientists are of the opinion that knowledge is a complex process of puzzle-solving within theoretical framework and many social scientists see human contributions by way of theories and ideologies, there is even greater difficulties in accepting the above picture.

Authentic disciplines can then be equated to the dishing out orders of reality and making known of the paths by which learners may come to realize truth in their own being and by this; the disciplines are viewed as the sole proper source of the curriculum.

b) Different disciplines ask different questions and make different kinds of statement e.g. the size or shape will be seen by a geolo gist who might be interested in the rock formations, a historian analysis is important in the rock formations or a health educator who might be interested in the food pattern, exercises and diseases of people living in the area. With this, schools have often only succeeded in differentiating between disciplines at the cost of ignoring the relationship between them which must not be so.

c) Disciplines and the nature of children's development-this postulates that children can better learn through basing

curriculum on disciplines having the work of Piaget at the back of the mind where he said that the process by which children classify experience is not simply the result of the social norms of the culture they happen to be born into there is something in human mental structure that facilitates certain kinds of conceptualization.

However, a child's development is neither simply a matter of socialization into cultural norms nor is it a question of automatic maturation but a very complex process of the interaction of a developing child with the social and physical environment. So, important distinctions need to be made between the logical ordering of a particular discipline and the "natural" psychological development of the child.

d) Disciplines and efficient learning-This is a psychological argument different from what you have been reading in b and c though there are overlappings. Simplification of understanding of knowledge, through structure is very important in this aspect of our discussion.

Discipline Design-Strengths and Weaknesses

- ❖ Students attain mastery of content and independent learning
- ❖ Subjects to be taught to any child at any stage of development
- ❖ Ignores information that cannot be classified as disciplined knowledge
- ❖ Addresses only the interests of the college bound
- ❖ Students must adapt to the curriculum

6.1.4. THE BROAD FIELD DESIGN

This is out to cater for fragmentation of knowledge which the subject and discipline designs are accused of. Here, related subject matters are grouped together and organized with emphasis on large fields or areas rather than on separate subjects.

Language Arts may have topics on spellings, reading, language-grammar, oral communication and literature under it, while integrated Science topics may have health science, biology, physics, chemistry, home economics, and agricultural science under it. Attempts to integrate content that appears to fit together logically. Allows students to discern relationships among the various aspects of the curriculum content, as well as wholeness of meaning. Students are invited to participate through the construction of meaning in grasping the meaning or meanings of the whole.

Advantages

i) It present to the learner in an orderly and systematic experience the society's cultural heritage and values.
ii) It integrates different subjects that are related together and so presents a harmonious package to the learner.

Disadvantages

i) It tends to make teachers master of "all subjects".
ii) If a teacher trained in one field is made to handle the subject, his/her major interest may dominate the topics covered or well explained to learners.

Broad Fields- Strengths and Weaknesses

- ❖ Allows students to discern relationships among various aspects of curriculum content.
- ❖ Students participate in the construction of meaning
- ❖ Issue of breadth vs depth

6.1.5. CORRELATION DESIGN

Allows for some linkage of separate subjects in order to reduce fragmentation of the curricular content. This comes from the core, correlated curriculum design that links separate subject designs in order to reduce fragmentation.

Subjects should be taught by combining and correlating their identical elements or contents to the learners. Tries to correlate between theory and practice of knowledge. Designed by Gandhiji for his Basic Education System–school subjects correlate to craft. Subjects are stil maintain their individual identitiles and teacehrs ther specialty subject, but identifies links between subject areas. History and Literature correlate well as does Math and Science. Currently not used by many teachers because it requires coperative planning. In the middle of "Separate Subjects" and "Total Content Integration". Attempts to identify ways to relate subjects, but maintain their separate identities. Eg: (Science and Math) (Literature and History).

Correlation- Strengths and Weaknesses

- ❖ Allows linkage of some subjects to reduce fragmentation.
- ❖ Innovative and Attractive
- ❖ Requires alternative forms of scheduling.
- ❖ Requires teachers to plan differently (cooperatively).
- ❖ Time Consuming, Teachers often separate departments, scheduling difficulties.

6.2. THE PROGRESSIVE OR LEANER-CENTRED DESIGN

According to Dewey, instead of the society fitting its children to the school curriculum, the curriculum should be tailored to the child's own experiences, needs and interests. Thus, a child learns how to comb, brush his/her teeth, bathe, because the child needs to have good personal health.

With one is saying here is that the children's mind should not be a dumping ground of knowledge which is a teacher-centred curriculum but the knowledge must be one that is carefully selected and tested and of interest and use to the learner. It emphasizes on individuality or individual development and as a result they are less practicable and place heavy demand on the teacher's competence.

Features

i) The interests of the student do facilitate his/her learning. Most interests are socially derived; hence, attention to them makes the programme more life related.
ii) Finding common interests and working together in terms of those unifying elements afford growth in life related skills.
iii) The curriculum is flexible.
iv) Teacher need to know a greater deal about the growth and development of children and youth.

The curriculum organization is from the students' ability and interest and not from prescribed content which are not pre-planned and these have been its major characteristic. Here, with emotional involvement of the learner, the whole learning process would become more vivid and hence more valuable. However, for it to be successful the learners must be active rather than passive, activity must be built along psychological problems rather than around logical topics, the programme must be flexible rather than rigid, democratic rather than authoritarian, must be community oriented and curt across subject lines.

Learner centered designs require a favourable or conducive environment for children to work well and benefit from what they are doing since children come from different homes. The learning environment will also ensure that the learner or the child does the following:

a) Be considerate to other people's needs.
b) Accepts and operates within the regulations and rules of his/her class but not be timid in giving constructive criticisms on some of them.
c) Shows sign of self discipline and inquisitive mind.
d) Recognizes his/her limits and capabilities. All the above can only be achieved through the guidance of a well experienced, and trained teacher.

Since this design, placed much demand on teachers, it is more popular in literature than in actual practice. These three examples of learner-centred designs are the activities/experience design, open classroom and humanistic design education. The commonest among them is the activities or experience design which Rousseau and Pestalozzi is best exponents. In this design, children are kept busy all the time with one interesting work and going to another after finishing the first according to the learners' needs and interests.

But, this has to take place in a type of environment discussed earlier which is good but very tasking because the teacher is in the dilemma of differentiating between "genuine" needs and interests and whims and fancies of the learners.

For this not to be theoretical on pages of texts, more researches need to be done, but we ask, do we need general interests of learners of certain groups? If yes, it is learner-centred again i.e. where is the individuality in it? If not, what is the opinion?

Criticisms

i) Since activities and processes take much of its totality, it is often criticized for its lack of content. However, this is an oversight because it got its knowledge from almost all spheres of human knowledge.
ii) Students who exclude what does not interest them now may come across them in future.
iii) Its lack of definite sequence, scope and organization pattern.
iv) The design demands an extraordinary teacher whose knowledge is very wide in virtually all the fields of endeavour; however, few teachers are trained for this.
v) Most schools textbooks and teaching materials are not tailored to this design.

vi) The cost of running this design is enormous.
vii) Writing, word recognition and numeracy can only be mastered by systematic practice.

Advantages

i) Learning is relevant to the learners' needs, which makes it meaningful and real.
ii) The problem solving activities will enable learners to face similar situations in real life.

To justify this design, Taba (1962) wrote that: People learn only what they experience. Only that learning which is related to active purposes and is rooted in experience translates itself into behavioural changes. Children learn best those things that are attached to solving actual problems that help them in meeting real needs or that connect with some active interest.

Learning in its true sense is an active transaction. Childhood has a meaning and vale in itself, apart from its value as a step on the way to maturity. The better the child, that is, the truer he is to his child nature, as such, the better man will he make when the proper time comes (john Adams, Evolution of Educational Theory, 1915).

Learner-Centered Designs

- ❖ Child Centered Designs
- ❖ Experience-Centered Designs
- ❖ Romantic (Radical) Designs
- ❖ Humanistic Designs

6.2.1. CHILD-CENTRED DESIGN

Students must be active in their learning environments. Design based on students' lives, needs, interest. Belief: effective learning did not require strict discipline, child's innate tendency to become engaged with interesting knowledge. Organized around human impulses: to socialize, to construct, inquire, experiment, express or create.

Child-Centered Strengths and Weaknesses

- ❖ Empowers students through ownership of knowledge
- ❖ Allows for constructivist learning
- ❖ Content not specific

6.2.2. EXPERIENCE-CENTERED DESIGN

Determined by the needs and interests of the students. Less formally planned than other curricula. Emphasis on learning by doing and individual problem solving. A problem task might be local pollution. Closely related to child-centered designs in that children's school world. But they differ in the children's needs and interests cannot be anticipated. Curriculum framework cannot be planned for all children. A curriculum that is not pre-planned, done "on the spot". Why?: child's needs and interests cannot be anticipated. Students design their own learning, construct and revise their knowledge through direct participation and active observation. Teachers design potential experiences for students to consider. Search for starting points, interest-linked to formalized knowledge.

Merits:

Help children become independent, responsible and confident. Give children and adults opportunity to invent and discover together as they explore materials and ideas and experience events.

6.2.3. ROMANTIC (RADICAL) DESIGN

Students must learn ways of engaging in a critique of knowledge. Learning is reflective, it is not externally imposed by someone n power. Radicals view society as deeply flawed and believe that schools used curriculum to control and indoctrinate, not to educate and emancipate. Students must accept responsibility for educating themselves and demand freed. Emancipation is the goal of education. Individuals should gain

those awarenesses, competencies, and attitudes to enable them to take control of their lives. Learning results from the interaction among people; by challenging content and permitting different views about the content, as well as from critiquing the purposes of the information presented.

Romantic Strengths and Weaknesses

- ❖ Emancipates the learner
- ❖ Threatens status quo

6.2.4. HUMANISTIC DESIGN

Emphasized human potential, empowering students by actively involving the in their own growth. Teachers must permit students to feel, value, grow. Teacher provides environments that encourage genuineness, empathy, and respect. Students approach problems with flexibility and intelligence, work cooperatively but do not need other's approval. The focus of attention should be on the subject nature of human existence; there is a relationship between learning and feeling. Empowering individuals. Stress the development of positive self-concept and interpersonal skills

Humanistic Strengths and Weaknesses

- ❖ Promotes self esteem
- ❖ Empowers individuals
- ❖ Inadequate consideration of methods in light of consequences for learners
- ❖ Inconsistent emphasis on uniqueness of individuals and activities that all students experience
- ❖ Too much emphasis on the needs of the individual over the overall society

Does not integrate what is known about human learning and development.

6.3. PROBLEM CENTERED DESIGNS

Problem centered designs is like the learner-centred ones developed in man's centred, philosophical assumptions with their structures based on democracy with emphasis on group welfare (man is neutral).

The designs' area of focus is the problem of individual and social problems of living which are very general, broad and all embracing.

With an all embracing organization, its coverage are contemporary issues-socio-geopolitics, areas of living, life situations, social concerns of youths, socio-economic reconstruction of society like the structural adjustment programme (SAP), AIDS/HIV, environmental related issues and community health.

As can be clearly seen, what distinguishes it from other designs is the emphasis placed on group welfare i.e. social needs rather than individuals or the relative degree of emphasis they place on individuals as opposed to social needs.

Characteristics

i) They are essentially prior-planned or force-planned but there is room for flexibility to build in necessary developments that might affect the learners.

ii) They stress both the content and the learners' development by taking their needs, abilities, interest into consideration through scope and sequence.

Problem-Centered Designs

- ❖ Life-Situations Design
- ❖ Core Design
- ❖ Social problems and Reconstructionist Designs

a) The Area of Living Design: Herbert Spencer's essay (1885), stated that the curriculum should tailor learners to

function effectively in the five basic societies of the world which areas of living that affect all known are:

i) Direct self-preservation
ii) Indirect self-preservation (e.g. getting food, shelter, clothing etc).
iii) Parenthood
iv) Citizenship and
v) Leisure activities all of which are not in place in a subject design curriculum. This can be regarded as the earliest movement towards this design.

Taba (1962) wrote that: Organising the curriculum around the activities of mankind will not only bring about a needed unification of knowledge but will also permit such a curriculum to be of maximum value to students' day-to-day life, as well as to prepare them for participation in a culture.

The above, together with the work of Herbert Spencer earlier mentioned, can and will continue to guide and motivate this type of design admirers. Its outstanding feature is the organization of traditional subject matter around areas of living and it is also its dilemma because of the determination of the essential areas of living that will constitute the organizing principles of the curriculum.

Advantages

i) It is a pre-planned reorganization of content that cuts across traditional subject matter lines.
ii) It focuses on problem solving methods of learning i.e. discouraging passive information but integrating process objectives like skills analysis, human relation skills as well as content objectives.
iii) The experiences and prevailing situations of learners are utilized as an initial step towards learning.

iv) Ability to bring learners interest and curriculum goals into the closet functional relationship, thereby making the learners relevant to the societal needs.

v) Subject matters are presented in a useful form which makes it relevant by transforming content to knowledge which the learners internalized.

Criticisms

i) Inability to thoroughly determine its scope and sequence.

ii) Lack of integration and continuity.

iii) Inadequate exposure of learners to the societal cultural heritage.

iv) Since learners learn mostly about current appealing issues, the learners might not be futuristic in outlook or be conservative.

Disadvantages

i) Majority of teachers are not trained along this design and its implementation might prove difficult for them.

ii) Parents are likely to resist the designs they themselves have not gone through.

iii) Scarcity of books and other teaching-learning materials produced along this design.

b) The Core Design: Movements against separate subjects curriculum with fragmentation of knowledge and a call for a coherence of the total curriculum led to the clamouring for a unifying core of studies which the other subjects would be related and subordinate. Centers on general education and is based on problems arising out of common human activities

Characteristics

i) It comprises all the parts of the curriculum that teach the needed concepts skills and attitudes needed by the learners to function well in the society i.e. it has the

intention of providing common learning or general education.

ii) Employing a block of time consisting of two or more periods for teaching the core component. This block-time class is just an administrative way which does not greatly affect curriculum design.

There are different types of core curricular which are:

a) The separate Subject Core-This consists of a series of required individual subjects taught separately by subject matter specialists. Since it does not legitimately represent a distinct curriculum design and makes no provision for the integration of content, it cannot be properly addressed as core curriculum. It is just another device of the subject curriculum which we have discussed about before.

b) The correlated core-It is deeply rooted in the subject centred tradition. It aims to provide common learning in a more coherent form by showing the relationships between the two or more subjects included in the core.

c) The Fused Core-Also rooted in the subject-centred tradition, it is based on the integration or 'combination' of two or more separate subjects. History, Economics, sociology, political science may be fused and taught as social science. With this, it looks more of a segment or part of broad fields than core design.

d) The Activity or Experience Core-It bases ultimate curriculum content and organization on the classroom plan and decision making of learners and teaches. It is normally taught in an extended block time class and embedded in the learners' interest.

e) The Areas of Living Core-It is regarded as the authentic core design because it is

f) Problem centred rather than subject centred

g) Essentially preplanned
h) Make provision for student-teacher planning
i) Practicum in health education course can fix into it.

Core Strengths and Weaknesses

- ❖ Unifies content
- ❖ Provides relevant subject matter
- ❖ Encourages active processing of information
- ❖ Fosters democratic processes in the classroom
- ❖ Nontraditional
- ❖ Ignores the fundamentals
- ❖ Materials are hard to find
- ❖ Requires an exceptional teacher

Approaches to Curriculum Design →	**Child or Learner - Centered Approach**	**Subject-Centered Approach**	**Problem - Centered Approach**
1. Teacher	Guide	Master	Trainer
2. Learners	Most Important / Center of the Educational Process	Competitors / Next masters	Problem - solvers/ independent
3. What to teach	What learners want to learn/accomplish	Subject matter content which are detached from life	Practical work (ex: development of business, social construction skills)
4. How to Teach	Self - discovery, Self - direction	Intellectual practices (ex:cram reviews)q	Direct participation (ex:case study)
5. Performance (measurement)	Performance compared to learner's own set of goals	Learner's mastery of the subject content	Dealing with life and its problems
6. Partners	Parents		Community

Design	Curricular Emphasis	Underlying Philosophy	Source	Spokespeople
Subject	Separate Subject	Essentialism Perennialism	Science Knowledge	Harris, Hutchins
Discipline	Scholarly disciplines	Essentialism Perennialism	Knowledge, Science	Bruner, Phanix, Schwab, Taba
Broad-Fields	Inderdisciplinary subject and scholarly disciplines	Essentialism Progressivism	Knowledge, Science	Broudy, Dewey
Correlation	Separate subjects disciplines linked but identities maintained	Essentialism Progressivism	Knowledge	Alberty and Alberty
Process	Procedural Knowledge of various disciplines, ways of thinking	Progressivism	Psychology Knowledge	Adams, Dewey, Parker
Child -Centered	Childs interest & needs	Progressivism	Child	Dewey, Kilpatrick, Parker
Experience	Child Interest & Experiences	Progressivism	Child	Freire, Habernas, Holt, Hitch
Radical	Child Interest & Experiences	Reconstructionism	Child, Society	Freire, Haberrnas, Holt, Hitch
Humanistic	Experiences, Interest needs of person & group	Reconstructionism Existentialism	Psychology, Child, Society	Combs, Fantini, Maslow, Rogers
Life-Situations	Life (Social) Problems	Reconstructionism	Society	Spencer
Reconstructionism	Focus on society	Reconstructionism	Society, Eternal	Apple, Brameld

c. Life-Situations Design

Pressing immediate problems of the society and the students' existing concerns are utilized. The connection of subject to real situations increases the relevance of the curriculum.

Focus on problem-solving procedures. The content is organized in ways that allow students to clearly view problem areas. Uses learner's past and present experiences to get them to analyze the basic aspects of living. Starting point: Student's existing concerns, society are pressing problems. Weakness:

Tends to indoctrinate youth to accept existing conditions. Persistent life situations are crucial to a society's successful functioning; it makes sense to organize a curriculum around them. Students will see direct relevance to what they are studying if the content is organized around aspects of community life. By having students study social or life situations, they not only study ways to improve society but become directly involved in that improvement

Life Situations Strengths and Weaknesses

- ❖ Presents subject matter in an integrated manner
- ❖ Encourages students to learn and apply problem solving procedures
- ❖ Relevant
- ❖ How to determine scope and sequence of essential areas of learning
- ❖ Does not expose student adequately to their cultural heritage
- ❖ Nontraditional

d) Social Reconstructionism Design

The school is an institution of social reform. Criticizes the progressivistis for putting too much emphasis on the individual learner to the neglect of the needs of society. School should take the lead n changing or reconstructing society. Reaction to the cold war climate and threat after second world war. School should both transmit knowledge about the existing social order but also seek to reconstruct it as well. Belief in bringing the community into the classroom. Actively seek to create a worldwide democracy. Curriculum should focus on student experience and taking social action on real problems, inquiry, dialogue and multiple perspectives and community-based learning is strategies for dealing with controversial issues. Systems must be changed to overcome oppression and improve human conditions.

Reconstructionism and Curriculum

For reconstructionism analysis, interpretation and evaluation of problems are insufficient commitment and action by students and teachers are needed.

Reconstructionist Design

Provide students with learning requisite for altering social, economic and political realities. Curriculum should foster social action, aimed at reconstructing society. Encourages industrial and political changes. Students should be involved in creating a more equitable society. Curriculum should address contemporary social problems and social action projects aimed at reconstructing society. Educators will effect social change and create a more just society

Advantages

It gives power to the learners: they are identified as the experts in knowing what they need to know. The constructivist element of this approach honors the social and cultural context of the learner.

Conclusion

All of the approaches mentioned above may play a substantial role in the organization of a social science curriculum. The decision regarding the use of an approach for the organization of some particular subject material and learning experience for a particular class or grade depends on the situations and circumstances available at the time of the development of the curriculum. We can try to make use of a number of approaches aimed at the organization of the selected subject material and experiences in a way to yield the desired attainment of the objectives of social science teaching with respect to a particular situation and circumstances.

Whatever the educational administrators, planners, managers, experts, teachers, students, think about education, it is basic that we can't solely on one curriculum design. However, in deciding the curriculum design to use at any stage the guiding objectives must be well stated, incorporated and at the end evaluated, to see how far have been successful.

Summary

Curriculum should develop the all round development / personality among the students and also that should be keeping similar in all the states. A well-integrated curriculum should be framed which include the study of science, language and humanities. The correct combination of those can develops an all round personality. Curriculum is the plan for bringing desirable changes in student behavior. There are many approaches in curriculum organization. Curriculum is the plan for bringing desirable changes in student behavior. there are many approaches in curriculum organization. Each approach has its own merits and demerits.

Self-Assessment 2

Identify some of the activities that the teacher must do in order to make teaching effective.

Possible answers to this activity are provided at the end of this unit.

Practice Activity

You have been asked to give a demonstration lesson to a group of student teachers. What attributes would you exhibit to capture their attention and encourage them to participate?

Possible answers to this activity are provided at the end of this unit.

Reflection

Do you think you can now deliver an effective lesson to your students? Have you looked in the mirror lately? Do you see a person whom you can respect? Do you see a person whom your students can respect?

Unit Test

What are the conditions necessary for effective lesson delivery?

Possible answers to this question are provided at the end of this unit

Suggested Answers

Self-Assessment 1

Your answers may vary from those below.

1. lecture, observation
2. observation, experimentation, research
3. demonstration, project work, illustrating
4. song and dance, dramatisation, role play
5. research, lecturing, observation

Self-Assessment 2

An effective teacher:

- ❖ provides opportunities to participate,
- ❖ evaluates learners and provides feedback,
- ❖ manages students' behaviour,
- ❖ communicates well,
- ❖ designs cognitive, affective and psychomotor learning activities, and
- ❖ maximises the use of class time.

Many other answers are possible.

Practice Activity

The teacher should exhibit the following attributes:

- cleanliness and smartness
- knowledgeability
- friendliness
- gender sensitivity
- respect.

Unit Test

Conditions necessary for an effective teaching and learning situation are:

- a conducive teaching and learning environment,
- availability of appropriate resources,
- supportive supervisors,
- a positive and friendly teacher who commands respect,
- a friendly environment, and
- a safe, non-threatening environment.

UNIT 7

CURRICULUM IMPLEMENTATION

Introduction

As a classroom practitioner, it is important that you know what is involved in implementing the prescribed curriculum. The aim of this unit is therefore to take you through the processes and stages of curriculum implementation.

Educational change involves changing teachers' beliefs and understanding as a prerequisite to improving teaching practices. Research indicates that teachers require a thorough understanding of the meaning of educational change before there is an acceptance and adoption of new programmes and approaches. Curriculum change requires in-school management teams, principals and boards of management to lead the implementation of change in the school as an organisation. Effective curriculum change and implementation requires time, personal interaction, in-service training, and other forms of people-based support (Fullan, 1993). The Department of Education and Science devised a range of initiatives and

programmes of professional development to support the phased implementation of change within primary schools nationally. These initiatives were designed to increase the capacity of schools to respond to change and to plan for and implement that change at individual school level.

Objectives

After completing this unit, you should be able to:

1. What is curriculum implementation.
2. List factors that influence curriculum implementation.
3. Explain models of curriculum implementation.

Content

This unit will cover the following topics:

- ❖ definition of curriculum implementation
- ❖ Models of curriculum implementation
- ❖ factors influencing curriculum implementation.

Curriculum Implementation

Curriculum implementation term refers to the act of working out the plans and suggestions that have been made by curriculum specialists and subject experts in a classroom or school setting. Teachers are the main curriculum implementers, while at the same time students, parents, school administrators can be directly or indirectly involved in the implementation process. Series of separate tasks guided by suitable materials. The Implemented Curriculum refers to the various learning experiences provided to the students to achieve the goals.

In the implementation phase, the schools conduct the course and carry out a plan to evaluate how well your methods and materials work in practice. It may be necessary to go back and modify the output from the development phase, based on the results of the evaluation study.

7.1. MODELS OF CURRICULUM IMPLEMENTATION

Implementation Models: Overcoming Resistance to Change (ORC) Model, Leadership Obstacle Course (LOC) Model, Linkage Model, Organizational Development (OD) Model and Rand Change Agent (RCA) Model.

ORC:

ORC Focuses on overcoming staff resistance to change that is present immediately before, or at the time of the introduction of the innovation.

LOC:

LOC Extends the ORC model and puts emphasis on the gathering of data to determine the extent and nature of the resistance in order to deal with it appropriately.

The Linkage Model:

The Linkage Model The linkage process involves a cycle of diagnosis, search, retrieval, formulation of solution, dissemination and evaluation.

OD:

OD This model is an information-processing change strategy that enables the system to improve its operations and the quality of interactions among its members to facilitate the introduction of change.

Rand Model:

Rand Model: The Rand Model is based on the assumption that the success of the implementation of new program depends on: A. the characteristics of the proposed change B. Competencies of the teaching and administrative staff C. the support of the local community.

7.2. IMPLEMENTATION MODEL

7.2.1. Overcoming-Resistance-to-Change

There are many different models for implementing curriculum. One common model is the Overcoming-Resistance-to-Change Model (ORC model). This model focuses on gaining advocates and sharing power equally between administrators and teachers. The ORC model focuses on allowing for the personal needs of the teachers to be addressed through maintaining high flexibility in the implementation.

The ORC model focuses on change from the perspective of the teacher. In this model there are four stages as listed below.

1. Unrelated concerns
2. Personal concerns
3. Task-related concerns
4. Impact-related concerns

Stage 1: Unrelated Concerns

The first stage is a stage of indifference. A teacher is aware change but do not see how it relates to their own life. As such the teacher is not worried about whatever innovation is coming. An example might be hearing about efforts to bring online learning to a school. The teacher knows this innovation is out their but it has not impacted them yet.

Stage 2: Personal Concerns

The teacher is now concerned with how the new innovation or curriculum will impact their life personally. For example, an English teacher wrestling with how using online learning will affect what they are trying to do in the classroom.

Stage 3: Task-Related Concerns

In stage 3, the teacher is thinking about how to use the new curriculum or innovation. Questions begin to go through their head in terms of application. For the online learning example, the

teacher may wonder about such problems as how much time will it take to learn this. What are the best ways to use this new innovation? What kind of support will I get? These are just some of the many questions that are possible.

Stage 4: Impact-Related Concerns

Now the teacher has taken their focus of their performance and is now worried about how this will affect students. At this stage, teachers are focusing on their students, peers, and school. For the online learning example, teachers start to wonder how online learning will benefit the students. A teacher may start to wonder how other teachers are doing as they try to use this new innovation. The shift here is from self to others.

7.2.2.LEADERSHIP OBSTACLE COURSE (LOC) MODEL

Obstacles

- Lack of Teacher Leadership Development

Leadership model

Acquiring new knowledge

Practicing leadership actions

Reflecting on self and new content

Co-creating new understanding.

- **Teachers don't think of themselves as leaders**

Uncover the assumptions about leadership

Explore new meanings and unique ideas about leadership

Creating own definitions of teacher leadership.

- **Professional Norms of Teaching**

Prevent collaborative work

Hinder professional relationships

Inhibit teachers influence toward improved instructional practices

❖ **Lack of principal support**

Collaboration

Trust

Mutual influence

Respect

Empowerment

❖ **Lack of Time**

Providing substitutes

Getting help for you from support personal

Organize and execute around priorities

7.2.3. LINKAGE MODEL

Linkage model encompass elements of the problem solving, RDDU, and social interaction models. An agent within the system has an interest both within and outside the system, thereby serving as a link.

Anaele (2008) reiterates that the linkage model unifies and integrates the three preceding models. Hoyle (1993) state that the linkage process is based on the link between the school and the various specialised or centralized agencies linkage centres just like Anaele has suggested.

This model is so called because during implementation a linkage is established between the problem and innovation. In this model two systems are handled, user system and resource system. There has to be a link between the 2 systems. The basic process is transfer of knowledge.

Stages involved in linkage models include the following:

Identification: a problem is identified and defined;

Communication: Communication channels linking the system to outside resources are established'

Research: external information and/or skills bearing on the problem defined are sought out and acquired;

Solution: with the assistance of the external resource, a solution to the problem is identified or designed;

Evaluation: the applied solution is monitored, often in collaboration with the external resource, and appropriate action follows if necessary.

Linkage models offer the best of all worlds in that they encompass many of the parameters of other models. The Linkage process involves a cycle of diagnosis, search, retrieval, formulation of solution, dissemination and evaluation.

Organizational Development (OD) Model

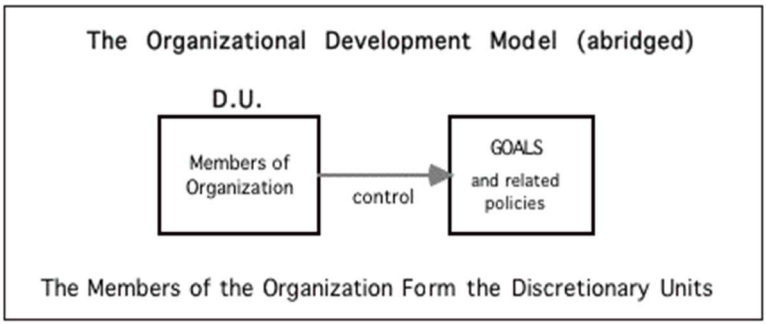
This model's key players are administrators, directors, and supervisors. We Should use the OD model as an on-going with teams within the school working together to identify the school's current and anticipated needs curriculum needs. Team collaboration would be the key to this program. Teams would meet weekly to discuss new programs, new materials, new research, and new ideas in either three one hour or one three-hour curriculum planning blocks in addition to their regularly scheduled planning time. Through constant collaboration the curriculum is individualized to the current of future needs of both the teacher and student to insure that "optimal learning occurs"

The only constant element in today's economic world is change. It is not only the most frequent phenomenon in organizations, but it is also the most difficult as many change efforts in organizations fail. The change goals, e.g. to increase the effectiveness of processes or systems or to create synergies are frequently unmet even though on paper the efforts look very interesting and effective. The endeavour fail, not due to the plans or nicely set presentations but because the human factor has not

been taken into consideration. The high complexity of change processes and the multiple challenges need the implementation of long-term holistic concepts and a strong commitment of managers and leaders within the organization. Organizational development and change management are core elements of today's management job descriptions. This module aims at creating an understanding of change and organizational development processes. Based on case studies which address multiple perspectives of organizational change, the topics will be reflected from a theoretical and practical point of view. Special attention will be given to the role of leadership in the context of change management and organizational development.

OD: Interventions

OD makes varieties of interventions to achieve change goals. OD practitioners are the people who play their crafts. Required target group individuals. Choice of interventions are done through unfreezing to refreezing. Collateral organization: Parallel learning structure. Intervention consists of addressing the weak areas, future opportunities and the desired outcomes based on diagonstic research. Of interventions are set of structured activities. A useful model of analyzing OD intervention is called Discrepancy Analysis. Discrepancy Analysis is required to study the gaps. Goals also represent gaps-between where we are and where we want to be.



7.2.4. RAND CHANGE AGENT (1975) MODEL

It reported the results of efforts to effect educational change through the ambitious national curriculum project of the education decade, which had been inaugurated by the Kennedy administration in the early 1960s'.

The rand studies more or less confirmed this phenomenon after surveying 293 local adoptions of national curriculum projects. In which they concluded mutual adaptation reflecting the implementation process.

The organisational dynamics seems to be the chief barriers to change.

The proponents of the RCA model see the success of the implementation of a curriculum as a function of;

- The characteristics of the proposed change
- The abilities of the academic and administration staff
- The readiness of the local community
- The organisational structure.

Self-Assessment 1

List what you consider to be the elements in curriculum implementation.

Possible answers to this activity are provided at the end of this unit.

7.3. FACTORS INFLUENCING CURRICULUM IMPLEMENTATION

List what you consider to be the factors that influence curriculum implementation and see whether they are similar to the ones discussed below:

The Teacher

As Whitaker (1979) asserts in the University of Zimbabwe (1995: 26) module, the teachers view their role in curriculum implementation as an autonomous one. They select and decide what to teach from the prescribed syllabus or curriculum.

Since implementation takes place through the interaction of the learner and the planned learning opportunities, the role and influence of the teacher in the process is indisputable.

You could be thinking, "I understand that teachers are pivotal in the curriculum implementation process, but what is their role in the curriculum planning process?" If the teacher is to be able to translate curriculum intentions into reality, it is imperative that the teacher understand the curriculum document or syllabus well in order to implement it effectively. If the curriculum is what teachers and students create together, as Wolfson (1997) states in Curriculum Implementations, the teacher must play a more significant role in designing the curriculum. Teachers must be involved in curriculum planning and development so that they can implement and modify the curriculum for the benefit of their learners.

The Learners

Learners are also a critical element in curriculum implementation. While teachers are the arbiters of the classroom practice, the learners hold the key to what is actually transmitted and adopted from the official curriculum. The official curriculum can be quite different from the curriculum that is actually implemented. The learner factor influences teachers in their selection of learning experiences, hence the need to consider the diverse characteristics of learners in curriculum implementation. For example, home background and learner ability can determine what is actually achieved in the classroom.

Resource Materials and Facilities

From your experience, you are aware that no meaningful teaching and learning take place without adequate resource materials. This applies to curriculum implementation as well. For the officially designed curriculum to be fully implemented as per plan, the government or Ministry of Education should supply schools with adequate resource materials such as textbooks,

teaching aids and stationery in order to enable teachers and learners to play their role satisfactorily in the curriculum implementation process. In Curriculum Implementation, it is suggested that the central government must also provide physical facilities such as classrooms, laboratories, workshops, libraries and sports fields in order to create an environment in which implementation can take place. The availability and quality of resource material and the availability of appropriate facilities have a great influence on curriculum implementation.

Interest Groups

Can you identify interest groups in your country that could influence the implementation of curricula?

These include parents, parents' and teachers' associations, School

Development Associations (SDAs) and School Development

Committees (SDCs) in local authorities, companies and private school proprietors. These groups can influence implementation in the following ways:

- ❖ Provide schools with financial resources to purchase required materials.
- ❖ Demand the inclusion of certain subjects in the curriculum.
- ❖ Influence learners to reject courses they consider detrimental to the interests of the group.

It is therefore important to involve these groups at the curriculum planning stage.

The School Environment

One other factor that influences curriculum implementation concerns the particular circumstances of each school.Schools located in rich socio-economic environments and those that have adequate human and material resources can implement the curriculum to an extent that would be difficult or impossible for schools in poor economic environments.

Culture and Ideology

Cultural and ideological differences within a society or country can also influence curriculum implementation. Some communities may resist a domineering culture or government ideology and hence affect the implementation of the centrally planned curriculum.

Instructional Supervision

Curriculum implementation cannot be achieved unless it has been made possible through the supervisory function of the school head. The head does this through:

- deploying staff,
- allocating time to subjects taught at the school,
- providing teaching and learning materials, and
- creating an atmosphere conducive to effective teaching and learning.

As stated in *Curriculum Implementation,* the head "monitors and guides curriculum implementation through ensuring that schemes of work, lesson plans and records of marks are prepared regularly". The head teacher maintains a school tone and culture that create the climate of social responsibility. Effective curriculum implementation does not take place in a school where the head is incapable of executing supervisory functions.

Assessment

Assessment in the form of examinations influences curriculum implementation tremendously. Due to the great value given to public examination certificates by communities and schools, teachers have tended to concentrate on subjects that promote academic excellence and little else. This action by the teacher obviously can affect the achievement of the broad goals and objectives of the curriculum.

Self-Assessment 2

From what you have read so far, list what you can identify as determinants of curriculum implementation.

Possible answers to this activity are provided at the end of this Unit.

CONCLUSION

The implementation of the curriculum is more than delivering new materials for courses. It requires an understanding of the purpose of the program, the roles people will play, and those affected. This process needs to be planned, but not rigid. It requires constant fine-tuning. It requires a community of trust.

Summary

This unit has outlined some of the factors that influence the implementation of a curriculum and discussed how each factor influences the implementation process. Do remember that in educational practice, these factors interact with each other and generate influences that cannot be attributed to one factor or another. You should view them as a whole.

Reflection

Pause and think of what you have learned in this unit. Do you feel that you can confidently and effectively implement your class curriculum?

Unit Test

1. In what way is the teacher an important factor in the implementation of a prescribed curriculum?
2. You have been asked to prepare a speech for the head teacher on what can be done to facilitate curriculum implementation. List the major points you would include in your speech.

Possible answers to this test are provided at the end of this unit.

Suggested Answers

Self-Assessment 1

The following can be considered as elements in implementation:

- course syllabus
- the teacher
- the teaching and learning materials and equipment
- the teaching and learning environment
- the learner.

Self-Assessment 2

The following can be considered as determinants of curriculum implementation:

- teachers
- learners
- interest groups
- availability of appropriate resource material, equipment and facilities.

Unit Test

1. The teacher is the one who:
   - translates the syllabus into learning activities,
   - interacts with learners and changes learners' behaviour,
   - influences student attitudes, and
   - Implements instructional supervision.

2. There are several possible answers to this question. The points below should be included in your answer along with your own additional suggestions.
   - Allocate adequate time to subjects taught at the schools.
   - Provide quality teaching and learning resources to teachers and students. There must be an adequate number of resources available to teachers and students.
   - Ensure that teachers' schemes of work, lesson plans and records are prepared regularly.
   - Create an atmosphere that will nurture teaching and learning effectively.

UNIT 8

CURRICULUM TRANSACTION

Introduction

As you will appreciate, it is important to check on the successes and progress made in the learning and teaching process and to provide professional guidance where possible. This unit discusses the monitoring of the school curriculum to facilitate learning and teacher development.

Curriculum transaction is effective implementation of lesson plans in classrooms. A lot of thought goes in planning and preparing the lesson plans. Children will benefit only if the implementation is strong, whether it be circle time, project work, subject time or music time; a teacher's effort should be to reach out effectively to each child in the group. Lesson plans are prepared much in advance and usually there is a gap between preparation and implementation. Children listen to some teachers and are receptive, while the same group of children could respond differently to another teacher. This is also to do with meaningfully engaging children and stimulating their thought processes.

Objectives

After completing this unit, you should be able to:

1. Define curriculum transaction
2. Explain why it is important to teach effectively
3. Identify and discuss aspects of a curriculum transaction that has to be enhanced.

Content

This unit will cover the following topics:

- ❖ concept of curriculum transaction
- ❖ the importance of effective teaching
- ❖ aspects of a curriculum transaction that has to be enhanced.

8.1. MEANING AND DEFINITION

Curriculum Transaction is the effective and desired implementation of the curriculum contents on the basis of aims and objectives listed in the curriculum. Curriculum Transaction incorporates effective planning for providing learning experiences for its learners, organization of planning, administration/implementation of the organized planning and evaluation of the implementations by the implementer and the experts in the relevant field.

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Curriculum Transaction or Curriculum management is the process of planning and organizing the curriculum in a particular subject area for different levels of education and continuously monitor it while being implemented.

With changing time, curriculum should also change reflecting the needs and aspirations of the people. There cannot be a uniform curriculum for all the countries for all the time, because education is related to social, economic and political changes in the country. Curriculum content should be based on current information and not on the past information that has been proved to be false or outdated and unusable. There is therefore need for constantly changing and updating the curriculum content.

Definition

"It is a tool in the hands of the artist (the teacher) to mould his material (the pupil) in accordance with his ideal in his studio (the school)." - **Cunningham**

"The curriculum is all of the experiences that individual learners have in a programme of education whose purpose is to achieve broad goals and related specific objectives, which are planned in terms of a framework of theory and research or past and professional practice." – **G.Hass**

Need and importance of curriculum transaction

Education leads from darkness of illiteracy to brightness of intellect. Education is the right of a human being in the world which is required to develop all of their attributes and skills to achieve their potential as human beings and members of society. In all aspects of the surrounding education community, the focus is on learning which strengthens the capabilities of human being to act progressively on their own behalf through the acquisition of relevant knowledge, useful skills and appropriate attitudes;

and which creates emotions of safety, security and healthy interaction in the human.

Curriculum is a systematic and intended packaging of competencies (i.e. knowledge, skills and attitudes that are underpinned by values) that learners should acquire through organized learning experiences both in formal and non-formal settings. A noble curriculum plays an important role to the development of thinking skills and the acquisition of relevant knowledge that learners need to apply in the context of their studies, daily life and careers.

Major emphasis should be given on effective transaction of curriculum in any educational program. The main responsibility of the curriculum transaction lies on the teachers and trainers who may use different types of pedagogies to create a nice academic environment in the institution and students can be benefited in gaining knowledge and developing skills as per industry demand. Curriculum is implemented by teachers, and depends moreover on the quality of teaching and learning strategies, learning materials and assessment. Quality education should not be regarded as a process of consumption, but as a process of interaction between teachers and students. A wide range of teaching techniques is used in institutions. The set of teaching techniques strongly depends on the instructional form of education. Apart from the ubiquitous lecture, the additional consultation teaching elements may be Seminar (small group teaching), Tutorials, Research seminar, Exercise classes or courses, Workshops (classroom based practical classes), Problem-solving sessions, Laboratory teaching, Demonstration classes, Placement (internship/traineeship), Work based practice, Fieldwork, Online or Distance or e-learning. Use of teaching elements depends on the focus of the teaching and the intended learning outcomes for the students.

Curriculum Transaction

It means management of curriculum and management refers to conscious preference from variety of alternative plus proposals and further the more that such choices involve purposeful commitment to recognize and derived objectives.

Bases of transaction of Curriculum:

- Social philosophy of the society
- National needs
- Nature of course of study
- Type of examination system
- Form of government
- Theory of human organisation
- Growth and development of students
- Recommendation of commissions and committees.

Teaching

Effective teaching is one that will bring about the intended learning outcome. Creating a situation to enhance learning. Showing, telling, giving instruction, making someone understand in order to learn. Imparting knowledge and skills required to master a subject matter.

Learning in Teaching and Teaching for Learning

- Ways of Teaching and Learning: different teaching methods and strategies can be clustered according to the number of students to be or being taught.
- For larger group teaching- lecture, expository, panel discussion, seminar, forum, demonstration, combination of lecture-demo.
- For smaller group- role playing, buzz session, work shop, process approach, discovery learning, and cooperative learning.
- For individualized teaching-modular instruction, e-teaching, programmed instruction.

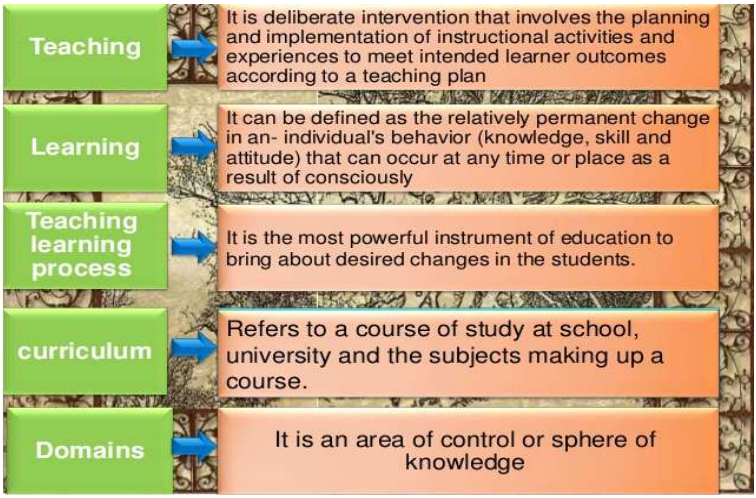
8.2. TEACHING-LEARNING PROCESS

Combined processes where an educator assesses learning needs, establishes specific learning objectives, develops teaching and learning strategies, implements plan of work and evaluates the outcomes of the instruction. The real action time or period of imparting knowledge, skills and attitude to adult learners by the adult facilitator or through the electronic media.

The old ways of learning and teaching is found to be too rigid and too out-dated. But, now teaching learning process consists of four basic elements;

a) Assessment
b) Planning
c) Implementation
d) Evaluation

It is a method for monitoring and judges the overall quality of learning or teaching based on objective, data and scientific criteria.



Seven Principles of Effective Teaching Learning Process

1. Encourages Student-Faculty Contact

2. Encourages Cooperation among Students
3. Encourages Active Learning
4. Prompt Feedback
5. Emphasizes Time on Task
6. Communicates High Expectations
7. Respects Diverse Talents and Ways of Learning

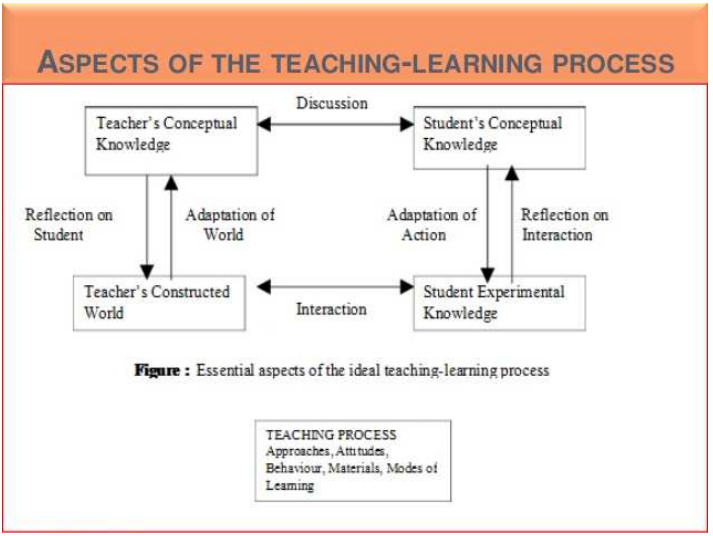
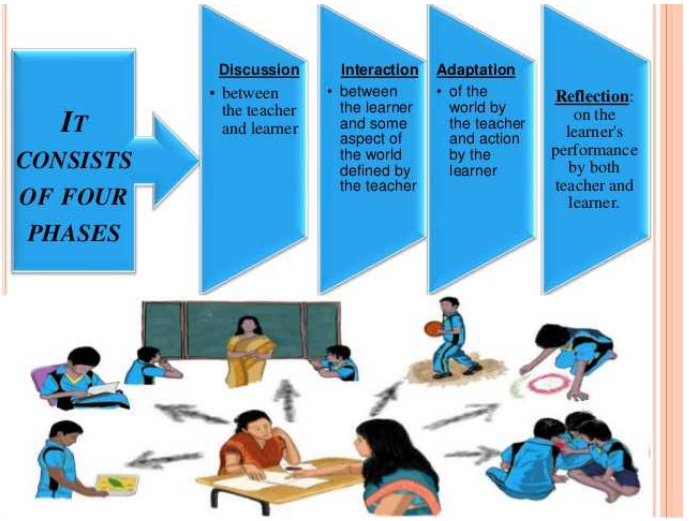


Figure : Essential aspects of the ideal teaching-learning process



Self-Assessment 1

Explain how monitoring the school curriculum can help the learner.

Possible answers to this activity are provided at the end of this unit.

8.3. CREATING AN EFFECTIVE TEACHING LEARNING ENVIRONMENT

Teachers are actively embracing many of the challenges highlighted in this report. In most countries, the large majority of teachers are satisfied with their jobs and consider that they make a significant educational difference for their students. Teachers are also investing in their professional development, both in terms of their time and often also in terms of money, an investment which goes hand in hand with a wider repertoire of pedagogic strategies used in the classroom. It is worrying that, on average across countries, three-quarters of teachers report that they would receive no recognition for increasing the quality of their work or for being more innovative in their teaching. In fact, three-quarters of teachers say that, in their school, the most effective teachers do not receive the most recognition and that their school principal does not take steps to alter the monetary rewards of a persistently underperforming teacher.

Better support for effective teaching is needed through teacher appraisal and feedback. The generally positive reception by teachers of the appraisal and feedback which they receive on their work indicates a willingness in the profession to move forward. And it's not just a bureaucratic exercise, but teachers generally report that appraisal and feedback make a difference in their work.

It was highlights better and more targeted professional development as an important lever towards improvement. But also shows that we need to do better in matching the costs and

benefit as well as supply and demand for professional development. Relatively few teachers participate in the kinds of professional development which they find has the largest impact on their work, namely qualification programmes and individual and collaborative research.

The hardest issues to grapple with relate to actually improving teaching practice. Teachers in most countries report using traditional practices aimed at transmitting knowledge in structured settings much more often than they use student-oriented practices, such as adapting teaching to individual needs. And even less so do they use enhanced learning activities that require a deeper cognitive activation of students.

It was suggested that effective school leadership plays a vital role in teachers' working lives and that it can make an important contribution to shaping the development of teachers. In schools where strong instructional leadership is present, IT shows that school principals are more likely to use further professional development to address teachers' weaknesses identified in appraisals. Often, there are also better student-teacher relations, greater recognition given to teachers for innovative teaching practices and more emphasis on developmental outcomes of teacher appraisals and more collaboration between teachers.

8.4. EFFECTIVE TEACHING

Traditionally, teachers were the 'holders of information' and their role was to impart this knowledge and skill to students. The internet has changed all that as information can now be obtained anywhere, any time on anything. Thus the role of teachers has changed to developing the skills and tools to assist students in critically analysing the plethora of information available.

Effective teaching is more than just the successful transference of knowledge and skill or application around a particular topic. Effective teaching ensures that this surface

approach to learning is replaced by deeper, student driven approaches to learning that analyse, develop, create and demonstrate understanding. Students need to initiate learning and maintain engagement during learning in their development as independent lifelong learners.

20 Observable Characteristics of Effective Teaching

1. Begins class promptly and in a well-organized way.
2. Treats students with respect and caring.
3. Provides the significance/importance of information to be learned.
4. Provides clear explanations. Holds attention and respect of students….practices effective classroom management.
5. Uses active, hands-on student learning.
6. Varies his/her instructional techniques.
7. Provides clear, specific expectations for assignments.
8. Provides frequent and immediate feedback to students on their performance.
9. Praises student answers and uses probing questions to clarify/elaborate answers.
10. Provides many concrete, real-life, practical examples.
11. Draws inferences from examples/models….and uses analogies.
12. Creates a class environment which is comfortable for students….allows students to speak freely.
13. Teaches at an appropriately fast pace, stopping to check student understanding and engagement.
14. Communicates at the level of all students in class.
15. Has a sense of humor!
16. Uses nonverbal behavior, such as gestures, walking around, and eye contact to reinforce his/her comments.
17. Presents him/herself in class as “real people.”

18. Focuses on the class objective and does not let class get sidetracked.
19. Uses feedback from students (and others) to assess and improve teaching.
20. Reflects on own teaching to improve it.

Factors Influencing Effective Teaching

There are a number of factors that can affect how effective you are as a teacher and how successful your students are in mastering subjects. When evaluating your performance as a teacher, as well as other influences that affect your classroom, such as student behavior, it is important to track how well the changes you make improve performance over time.

Appropriate Training

Having the appropriate training to teach a specific subject is an important factor in being able to teach that class effectively. For teaching in the public school system, teachers should have taken courses in the subjects they wish to teach. For teaching college level courses, a PhD in the discipline or a related field is normally required, although community colleges accept a master's degree and some universities allow someone with a master's to teach while pursuing a PhD.

Clear and Concise

Good communication skills are a must in order to effectively teach, whether you teach middle school or are college instructors. You must be able to project in a clear way. If students can't keep up with you or have a hard time hearing you, they may also have a hard time understanding the ideas or concepts they need to master to do well on exams and other assignments.

Learning Environment

Schools that offer students a positive learning environment, including the use technology in the classroom and a quality

library, give students an edge in mastering math, English, science and other subjects. Up-to-date textbooks and other materials to use during lectures and other teacher presentations are also important.

Innovative Teachers

Teachers who are good at sparking the imagination of students through hands-on learning activities or other creative approaches draw students into the joy of learning. These students no longer see new ideas as something to dread. Educators like Jaime Escalante, a math teacher portrayed in the movie "Stand and Deliver," show that regardless of the economic disadvantages of many students and school districts, a teacher who uses a creative approach can make a difference.

Student Behavior

Managing student behavior and maintaining discipline in your classroom is vital to creating a learning environment where each student feels he can share his thoughts and ideas with you and with his peers. It also helps you stay on track in presenting materials on schedule. This enables you to fulfill the required curriculum for that academic year, semester or quarter.

8.5. INSTRUCTIONAL SYSTEM

Instructional-Design Process or **Instructional System Development** (ISD) is the process a teacher or instructional designer should use to plan and prepare for instruction, while instructional-design theory concerns what the instruction should be like (i.e., what methods of instruction should be used). However, instructional-design theories and instructional-design processes are closely related. Different theories require differences in the process used to apply those theories to particular situations.

Instructional methods are also *componential*, meaning that each can be done in different ways and therefore made up of

different components (or features). For example, group discussion can be viewed as a method of instruction. But group discussion is made up of many *smaller methods*, such as forming groups, presenting an issue for discussion, rules to be followed for discussions, and evaluating group's as well as individuals' efforts and so forth. In addition, there are usually many *different ways* in which a method can be performed. The discussion topic can be presented in many ways; the rules for discussions can be made differently, and so forth. More details can be provided for a method by offering *criteria* that the method should meet. An instructional-design theory is easier to apply if it describes methods on a relatively detailed level.

Another characteristic of methods of instruction is that they are probabilistic. This means that methods do not guarantee the desired instructional and learning outcomes. They only increase the probability that the desired results will occur. This is because there are so many factors that influence how well a method of instruction works

Instruction is directing students to appropriate learning activities; guiding students to appropriate knowledge; helping students rehearse, encode, and process information; monitoring student performance; and providing feedback as to the appropriateness of the student's learning activities and practice performance.

Is teaching different from instruction? Teaching is only one part of instruction. The word "teach" infers that a person is lecturing or demonstrating something to the learner. However, the teacher or trainer's role includes many different tasks, such as selecting materials, gauging student readiness to learn, managing class time, monitoring instructional activities, and finally serving as a content resource and a learning facilitator. "Instruction" puts emphasis on a whole range of activities the

teacher uses to engage the students. An instructor who has knowledge of the principles of instruction design has a broader vision of what it takes to help students learn: when it would benefit students to be put into groups, when practice and feedback will be most effective, and what are the pre-requisites for problem-solving and higher-order learning skills,

8.6.NEED TO ENHANCE CURRICULUM TRANSACTION

Education leads from darkness of illiteracy to brightness of intellect. Education is the right of a human being in the world which is required to develop all of their attributes and skills to achieve their potential as human beings and members of society. In all aspects of the surrounding education community, the focus is on learning which strengthens the capabilities of human being to act progressively on their own behalf through the acquisition of relevant knowledge, useful skills and appropriate attitudes; and which creates emotions of safety, security and healthy interaction in the human.

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Major emphasis should be given on effective transaction of curriculum in any educational program. The main responsibility of the curriculum transaction lies on the teachers and trainers who may use different types of pedagogies to create a nice academic environment in the institution and students can be benefited in gaining knowledge and developing skills as per industry demand. Curriculum is implemented by teachers, and

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8.7.DIFFERENT TYPES OF ENHANCING CURRICULUM TRANSACTIONS

Modes of Curriculum Transaction

Transactional modes have essentially been of two categories, first one is face-to-face mode and the second is distance mode.

1. The face-to-face mode refers to instructional interactions in which learners and the teacher transact a curriculum in a face-to-face situation. This mode includes inputs like seminars, discussions, lectures, demonstrations and any activity involving direct interaction between the learners and the teacher. The face-to-face mode is the oldest and most widely accepted mode. Obviously, at a time when electronic media were not available and even the print medium was unknown, the most easily accessible channel for transmission of knowledge and for communication was through face-to-face interaction with the teacher. With printing and the public school system, text books became available and assumed significance. Over the years, the

print medium has provided support to oral communication with the teacher, as the main focus in schools

2. The distance mode, as the term indicates, pertains to all kinds of interactions between the teacher and learners in which they are not in direct contact with one another and require a third channel or medium for contact. These include the print, audio, video, or any other mode. Open learning systems generally utilize such modes. Due to the indirectness of the contact or the distance between the teacher and learner, none of these media can by itself suffice for effective instruction. They are, therefore, used in combination in order to make experiences more 'realistic' and meaningful. Of late, more interactive media have been designed and utilized, such as interactive satellite television or teleconferencing. The two modes need not be mutually exclusive. Correspondence education acquired significance as an alternative to 'teacher talk' in India, with increased availability of printing facilities. As correspondence education widened with the emergence of open learning system, the media of transaction were diversified to include audio, visual and audio-visual mechanisms. More recently, interactive television has come to be used for communication of knowledge. The use of media has resulted in new roles for a teacher: that of a designer and developer of these media making them suitable for instructional purposes, and that of a user of these during instruction.

8.8. NEW APPROACHES TO CURRICULUM TRANSACTION

1. CRITICAL PEDEGOGOY
2. PROBLEM BASED LEARNING
3. REFLECTIVE LEARNING
4. EXPERIENTIAL LEARNING

8.7.1. CRITICAL PEDAGOGY

Critical pedagogy is a philosophy of education and social movement that combines education with critical theory. First described by Paulo Freire, it has since been developed by Henry Giroux and others as a praxis-oriented "educational movement, guided by passion and principle, to help students develop consciousness of freedom, recognize authoritarian tendencies, and connect knowledge to power and the ability to take constructive action."

Critical pedagogue Ira Shor defines critical pedagogy as:

"Habits of thought, reading, writing, and speaking which go beneath surface meaning, first impressions, dominant myths, official pronouncements, traditional clichés, received wisdom, and mere opinions, to understand the deep meaning, root causes, social context, ideology, and personal consequences of any action, event, object, process, organization, experience, text, subject matter, policy, mass media, or discourse."

Critical pedagogy includes relationships between teaching and learning. Its proponents claim that it is a continuous process of what they call "unlearning", "learning", and "relearning", "reflection", "evaluation", and the impact that these actions have on the students, in particular students whom they believe have been historically and continue to be disenfranchised by what they call "traditional schooling"

8.7.2. PROBLEM - BASED LEARNING

Problem-based learning (PBL) is a student-centered pedagogy in which students learn about a subject through the experience of problem solving. Students learn both thinking strategies and domain knowledge. The PBL format originated from the medical school of thought, and is now used in other schools of thought too. It was developed at McMaster University School of Medicine in Canada in the 1960s and has since spread

around the world. The goals of PBL are to help the students develop flexible knowledge, effective problem solving skills, self-directed learning, effective collaboration skills and intrinsic motivation. Problem-based learning is a style of active learning.

8.7.3. REFLECTIVE LEARNING

There are various definitions of "reflective learning" and much has been written on the subject. Nevertheless, it is generally understood that reflection as it applies to learning is a skill, which can be summarised as:

- the ability to look back over an experience and break it down into its significant aspects, such as any factors affecting success or failure
- a means of learning by making links between theory and practice (or learning and action)
- a means of improving performance, by using the outcome of reflection to inform future practice
- a way of recognising, and maximising the personal value of, a learning experience
- a way of turning surface learning into deep learning

8.7.4. EXPERIENTIAL LEARNING

Experiential learning is learning through reflection on doing, which is often contrasted with rote or didactic learning. Experiential learning is related to, but not synonymous with, experiential, action learning, adventure learning, free choice learning, cooperative learning, and service learning. While there are relationships and connections between all these theories of education, importantly they are also separate terms with separate meanings.

Experiential learning focuses on the learning process for the individual. It is often used synonymously with the phrase "experiential education", however, while experiential learning

considers the individual learning process, experiential education should be considered a broader philosophy of education. As such, it is concerned with issues such as the relationship of teacher and student, as well as broader issues of educational structure and objectives. An example of experiential learning is going to the zoo and learning through observation and interaction with the zoo environment, as opposed to reading about animals from a book. Thus, one makes discoveries and experiments with knowledge firsthand, instead of hearing or reading about others' experiences. In business school, internship, and job-shadowing, opportunities in a student's field of interest are elevated as examples of valuable experiential learning which contribute significantly to the student's overall understanding of the real-time environment.

A third example of experiential learning involves learning how to ride a bike, a process which can illustrate the widely known four-step experiential learning model (ELM) as purported by Kolb and outlined in Figure below. Following this example, in the "concrete experience" stage, the learner physically experiences the bike in the "here-and-now". This experience forms "the basis for observation and reflection" and the learner has the opportunity to consider what is working or failing (reflective observation), and to think about ways to improve on the next attempt made at riding (abstract conceptualization). Every new attempt to ride is informed by a cyclical pattern of previous experience, thought and reflection (active experimentation).

CONCLUSION

Curriculum Transaction or Curriculum management is the process of planning and organizing the curriculum in a particular subject area for different levels of education and continuously monitors it while being implemented. Essential requirements for

the transaction of curriculum include duration, intake, eligibility, content and qualification of teaching staff and certain other factors. Through this study, we understood that all the factors mentioned are playing an important role in the effective transaction of the curriculum.

Self-Assessment 2

List four aspects of the school curriculum that are monitored. Discuss any two of them.

Possible answers to this activity are provided at the end of this unit.

Summary

The success of any educational activity lies in the strategies used for monitoring the curriculum. Learners, teachers, supervisors, learning materials and methods are improved through monitoring. In the next unit, we will discuss the evaluation of the school curriculum.

Reflection

As a teacher, think of the last encounter you had with your supervisor. How useful was it to you? Have you made any changes to your teaching methods since the last visit? How successful have these changes been?

Unit Test

1. Who are the beneficiaries of monitoring a school curriculum?
2. What do you understand by monitoring of a school curriculum?
3. What aspects of a school curriculum are monitored?

Possible answers to these questions are provided at the end of this unit.

Suggested Answers

Self-Assessment 1

Monitoring of the curriculum ensures that the learner:

- ❖ receives maximum gain from learning experiences;
- ❖ sharpens learning and technical skills;
- ❖ develops intellectually, socially and emotionally;
- ❖ interacts with learning materials meaningfully; and
- ❖ understands the content being taught.

Self-Assessment 2

Your answer to this activity could include some of the following points:

Aspect Discussion

Timetable

- length of day and activities
- resources available
- prescribed time per subject
- number of subjects
- availability of the timetable

Resource allocation

- finances, textbooks and personnel

Scheming and planning

- relevance, appropriateness of content, activities, objectives and organisation of work

Teaching methods

- relevance
- appropriateness, pacing and interactiveness

Learning activities

- individual learners' progress
- level of feedback that is provided

Unit Test

Answers to this activity could include some of the following points

1. The beneficiaries of monitoring are the learner, the teacher, the supervisors and the society.
2. Monitoring is the process of helping the teacher to improve the learning opportunities for the learner.
3. Aspects of the curriculum that are monitored include:
   - ❖ the timetable,
   - ❖ the resource allocation,
   - ❖ scheming and planning,
   - ❖ the teaching methods and lesson delivery,
   - ❖ the learning activities, and
   - ❖ evaluation.

❁❁❁❁❁

UNIT 9

CURRICULUM EVALUATION

Introduction

Now that you studied curriculum transaction in Unit 8, you are ready to review another important topic related to the curriculum. In this unit, you will be exposed to the concept of curriculum evaluation.

Curriculum evaluation is historically as rich as education. The evaluation concept is so comprehensive that contains several evaluation activities with the common function of investigating a certain curriculum in a given administrative context. Therefore, the evaluation methods and strategies are different. In this study, the differences in evaluation studies are classified on the basis of six factors curriculum development stage, the evaluation subject, criteria, the types of data, data summarization method and function. In each stage, the development team focuses on a particular task hence; certain types of evaluation are presented at each stage in order to ensure a successful administration of the new curriculum. Curriculum evaluation is a necessary and

important aspect of any national education system. It provides the basis for curriculum policy decisions, for feedback on continuous curriculum adjustments and processes of curriculum implementation.

Objectives

After completing this unit, you should be able to:

1. Give a broad definition of curriculum evaluation.
2. Distinguish among various forms of evaluation.
3. Describe functions of curriculum evaluation.
4. Explain how to evaluate your class syllabus or school curriculum.

Content

This unit will cover the following topics:

- definition of curriculum evaluation
- curriculum evaluation approaches
- functions of curriculum evaluation
- models of evaluation

Evaluate the Curriculum

You might want to review the curriculum because

- Students aren't achieving
- Students are expressing dissatisfaction
- Professional expectations are changing
- The student market is changing
- Resources (including accommodation, time and staff) are changing

9.1. CONCEPT OF EVALUATION

Evaluation has a wider meaning. It goes beyond measurement. When from useful information including measurement, we make a judgement that is evaluation. Example:- The teacher may evaluate the student Geetha that she is doing well in mathematics, because most of the class scored

50/100. This is an example of evaluation using quantitative data (measurable information). The teacher might also make an evaluation based on qualitative data, such as her observations that Geetha works hard, has an enthusiastic attitude towards mathematics and finishes her assignments quickly.

- Evaluation is a Science of providing information for decision making.
- It Includes measurement, assessment and testing
- It is a process that involves
- Information gathering
- Information processing
- Judgement forming
- Decision making

From the above, we can arrive at the following concept of evaluation

Evaluation is a concept that has emerged as a prominent process of assessing, testing and measuring. Its main objective is Qualitative Improvement.

Evaluation is a process of making value judgements over a level of performance or achievement. Making value judgements in Evaluation process presupposes the set of objectives.

Evaluation implies a critical assessment of educative process and its outcome in the light of the objectives.

9.2. DEFINING EVALUATION

Evaluation of a curriculum happens in order to decide whether to accept, change, or eliminate various aspects of a curriculum. The overall goal is to understand if the curriculum is producing the desired results. This implies that the evaluators know what to expect prior to the evaluation and are looking for these predetermined results.

Evaluation is about gathering data. This data can be collected in many different ways. The various data collection approaches are the same as any used in research. They include observation, interviews, surveys, and more. The data is often aggregated and used to determine if the goals of a program are being met.

Curriculum Evaluation

Curriculum is defined as the sum of all experiences, which are to be provided in an educational institution. According to Wheeler (1967) curriculum means the planned experiences offered to the learners under the guidance of the school. Curriculum has been defined by Tanner & Tanner (1975) as the planned guided learning experience and intended learning outcomes formulated through a systematic reconstruction of knowledge and experiences under the auspices of the school for the learner's continuous and willful growth in academic, personal and social competence.

Evaluation is a word used in a variety of ways sometimes with imprecise and overlapping meanings (Lawton, 1973). It is much wider than that measurement. It is more fundamentally concerned with deciding on the value or worth wholeness of a learning process as well as the effectiveness with which it is being carried out.

Curriculum evaluation refers to the process of studying the merit or worth of some aspect, or the whole of a curriculum. Depending on the way in which the term curriculum is defined, the focus or objects of curriculum evaluation could include Curriculum design, Learning environment, Instruction Process, Resources and Materials used in instructional process It is also essential to find out about the adequacy as well as the provision of the required teaching resources such as teaching aids, laboratories, library books and instruments (Wiles & Bondi,

1989) Curriculum evaluation is clearly a process by which we attempt to gauge the value and effectiveness of any piece of educational activity which could be a rational project, or a piece of work under taken by or with pupils.

The process of measuring and judging the extent to which the planned courses, programmes, learning activities and opportunities as expressed in the formal curriculum actually produce the expected results. If carried out effectively, this process can enable decisions to be made about improvements and future progress.

Worthen and Sanders (1987) define curriculum evaluation as "the formal determination of the quality, effectiveness, or value of a programme, product, project, process, objective, or curriculum".

Ornstein and Hunkins (1998) define curriculum evaluation as "a process or cluster of processes that people perform in order to gather data that will enable them to decide whether to accept, change or eliminate something the curriculum in general or an educational textbook in particular".

Persons	Definition
Ornstein, A. & Hunkins , F. (1998)	Curriculum evaluation is a process done in order to gather data that enables one to decide whether to accept, change, eliminate the whole curriculum of a textbook.
McNeil, J. (1997)	Evaluation answers two questions . 1. Do planned learning opportunities , programs, courses and activities as developed and organized actually produced desired results? 2. How can a curriculum best be improved?
Gay, L. (1985)	Evaluation is to identify the weaknesses and strengths as well as problems encountered in the implementation ,to improve the curriculum development process. It is to determine the effectiveness of and the returns on allocated finance .
Olivia , P. (1988)	It is a process of delineating, obtaining and providing useful information for judging alternatives for purposes of modifying, or eliminating the curriculum.

9.3. NEED FOR CURRICULUM EVALUATION

To provide a conceptual framework for specific purpose of the evaluation. Several experts have proposed different models describing how and what should be involved in evaluating a curriculum. Models are useful because they help us define the parameters of an evaluation, what concepts to study and the procedures to be used to extract important data.

9.4. IMPORTANCE OF CURRICULUM EVALUATION

Educational prepares future generation to take their due place in the society. It becomes essential that substandard educational goals, materials and methods of instruction are not retained but up-dated in consonance with the advances in social cultural and scientific field. It is also important to ascertain how different educational institutions and situations interpret a given or prescribed curriculum. Hence, arises the need for curriculum evaluation. Curriculum evaluation monitors and reports on the quality of education. Cronbach (1963) distinguishes three types of decisions for which evaluation is used.

1. Course Improvement: deciding what instructional material and methods are satisfactory and where changes are needed.

2. Decisions about individuals: Identifying the needs of the pupil for the sale of planning of instruction and grouping, acquainting the pupil with his own deficiencies.

3. Administrative regulations: Judging how good the school system is, how good individual teachers are. The goal of evaluation must be to answer questions of selection, adoption, support and worth of educational materials and activities. It helps in identifying the necessary improvements to be made in content, teaching methods, learning experiences, educational facilities, staff-selection and development of educational objectives. It also serves the need of the policy makers, administrators and other members of the society for the information about the educational system.

9.5.THE OBJECTIVES OF CURRICULUM EVALUATION

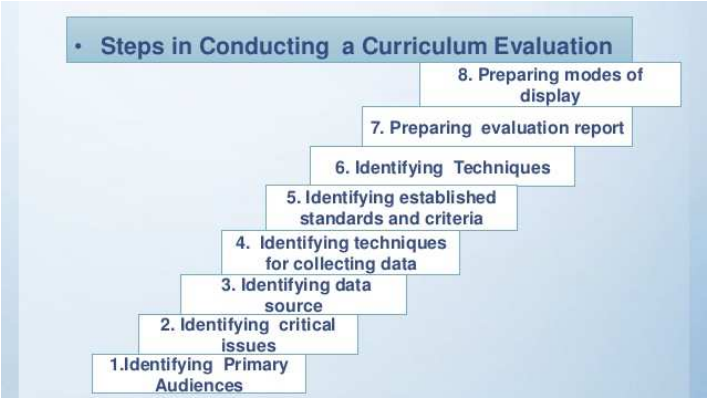
These are the general objectives of curriculum evaluation:

- Examine and evaluate the historical, philosophical, ethical, social, economic and political influence on curriculum.
- Evaluate curriculum methods and structures in relation to national curricular standards and to national value-added mandates.
- Relate cognitive and brain-based research to curricular methods, structure and intents.
- Analyze the compatibility of the curriculum and related assessments.
- Explore the effects of curriculum on teaching, learning, supervision and policy.
- Evaluate the curricular demands of a digital age.
- Define personal philosophy and approaches regarding curriculum design, development and implementation.

Reasons for Curriculum Evaluation

- Curriculum evaluation identifies the strengths and weaknesses of an existing curriculum that will be the basis of the intended plan, design or implementation.
- When evaluation is done in the middle of the curriculum development, it will designed or implemented curriculum can produce or is producing the desired results. This is related to monitoring.
- Curriculum evaluation will guide whether the results have equalled or exceed the standards (sometimes called as TERMINAL ASSESSMENT)
- Curriculum evaluation provides information necessary for teachers, school managers; curriculum specialist for policy recommendations that will enhance achieved learning outcomes. This is the basis of decision making.

- In curriculum evaluation, important processes wee evolved such as
  a) Needs assessment,
  b) Monitoring
  c) Terminal assessment and
  d) Decision making



9.6. THE IMPORTANT SOURCES OF CURRICULUM EVALUATION

Important sources of curriculum evaluation include students, teachers, educational experts, subject experts, curriculum experts, policy making community, dropout sample, employers and entrepreneurs.

9.7. METHODS OF CURRICULUM EVALUATION

A variety of techniques are employed. Questionnaire, checklist, interview, group discussions evaluation workshops and Delphi techniques are the major one.

a) Observation: It is related to curriculum transaction. Observation schedule helps the evaluator to focus his attention on the aspects of the process that are most relevant to his investigation. This method gains credibility when it contains both subjective and objective methods. Interviews and feed-back and other documentary evidences may supplement observations.

b) Questionnaire: It is used to obtain reaction of curriculum users namely pupils, teachers, administrators, parents and other educational workers concerning various aspects of prescribed curriculum are to be ascertained.

c) Check-list: It can be used as a part of questionnaire and interview. It provides numbers of responses out of which most appropriate responses are to be checked by the respondent.

d) Interview: It is a basic technique of evaluation and for gathering information. It may be formal or informal in nature. The information required should be suitably defined and the presentation of questions should in no case betray and sort of bias the part of the interviewer.

e) Workshops and Group discussion : In this technique, experts are invited at one place to deliberate upon syllabi, materials etc; and to arrive at a consensus regarding the quality of the same. The materials may be evaluated against a set of criteria that might have been prepared by the evaluator.

f) Delphi Technique: A "Remote Conferencing" is employed instead of work-shop technique. It can be used at various stages of curriculum development. This technique is cost effective and provides an equal opportunity to all members of the group to express their individual views.

Self-Assessment 1

According to Gatawa, what are the three major meanings of curriculum evaluation?

Possible answers to this activity are provided at the end of this unit.

9.8. APPROACHES OF CURRICULUM EVALUATION

It is a way of dealing with something, a way of doing or thinking about something (Meriam-Webster).

Gatawa (1990:60) has identified five curriculum evaluation approaches:

- bureaucratic evaluation
- autocratic evaluation
- democratic evaluation
- norm-referenced evaluation
- criterion-referenced evaluation.

Bureaucratic Evaluation

This evaluation is usually initiated by the government or the Ministry of Education. In your circumstances, the Ministry of Education could evaluate a course of study or subjects taughtin schools to find out whether they need improvement or modifications. The results of the evaluation are used by the Ministry of Education or the government.

Autocratic Evaluation

This evaluation focuses on what is considered to be the educational needs of a curriculum. Governments or ministries usually ask independent evaluators such as consultants to conduct this evaluation. The government or ministry is not obliged to accept the results of the evaluation.

Democratic Evaluation

This focuses on the experiences and reactions the curriculum initiators have had with the programmes or project being evaluated. In this approach, the evaluation does not lead to firm recommendations to be considered by the initiators or programme implementers.

Norm-Referenced Evaluation

This evaluates students' performance relative to other students' performance. The performance of current students or of previous students can be compared.

Criterion-Referenced Evaluation

Criterion referencing measures students' actual performance and compares it with the objectives of instruction identified in the syllabus.

Self-Assessment 2

1. List the evaluation approaches as suggested by Gatawa (1990).

2. Which of the above evaluation approaches: dents' actual performance and compares it with the objectives of instruction identified in the syllabus.

9.9. FOCUSES OF EVALUATION

9.10. MODELS OF CURRICULUM EVALUATION

How can the merit and worth of such aspects of curriculum be determined? Evaluation specialists have proposed an array of models, an examination of which can provide useful background for the process presented in this work.

9.10.1. TYLER'S OBJECTIVES-CENTERED MODEL

One of the earliest curriculum evaluation models, which continue to influence many assessment projects, was that proposed by Ralph Tyler (1950) in his monograph. Basic Principles of Curriculum and Instruction. As explained in this work and used in numerous large-scale assessment efforts, the

Tyler approach moved rationally and systematically through several related steps:

1. Begin with the behavioral objectives that have been previously determined. Those objectives should specify both the content of learning and the student behavior expected: "Demonstrate familiarity with dependable sources of information on questions relating to nutrition."
2. Identify the situations that will give the student the opportunity to express the behavior embodied in the objective and that evoke or encourage this behavior. Thus, if you wish to assess oral language use, identify situations that evoke oral language.
3. Select, modify, or construct suitable evaluation instruments, and check the instruments for objectivity, reliability, and validity.
4. Use the instruments to obtain summarized or appraised results.
5. Compare the results obtained from several instruments before and after given periods in order to estimate the amount of change taking place.
6. Analyze the results in order to determine strengths and weaknesses of the curriculum and to identify possible explanations about the reason for this particular pattern of strengths and weaknesses. 7. Use the results to make the necessary modifications in the curriculum. (as cited in Glatthorn, 1987, p. 273)

The Tyler model has several advantages:

- ❖ It is relatively easy to understand and apply.
- ❖ It is rational and systematic.
- ❖ It focuses attention on curricular strengths and weaknesses, rather than being concerned solely with the performance of individual students.

- ❖ It also emphasizes the importance of a continuing cycle of assessment, analysis, and improvement.

As Guba and Lincoln (1981) pointed out, however, it suffers from several deficiencies. It does not suggest how the objectives themselves should be evaluated. It does not provide standards or suggest how standards should be developed. Its emphasis on the prior statement of objectives may restrict creativity in curriculum development, and it seems to place undue emphasis on the preassessment and post assessment, ignoring completely the need for formative assessment. Similarly, Baron and Boschee (1995), in their book Authentic Assessment: The Key to Unlocking Student Success, stress that "we are encountering fundamental changes in the way we view and conduct assessment in American schools". And "sixty years have passed since we experienced such a deep-seated and thoughtful revaluation of our assessment methods".

9.10.2. STUFFLEBEAM'S CONTEXT, INPUT, PROCESS, PRODUCT (CIPP) MODEL

These obvious weaknesses in the Tyler model led several evaluation experts in the late 1960s and early 1970s to attack the Tyler model and to offer their own alternatives. The alternative that had the greatest impact was that developed by a Phi Delta Kappa committee chaired by Daniel Stufflebeam (1971). This model seemed to appeal to educational leaders because it emphasized the importance of producing evaluative data for decision making; in fact, decision making was the sole justification for evaluation, in the view of the Phi Delta Kappa committee. To service the needs of decision makers, the Stufflebeam model provides a means for generating data relating to four stages of program operation: context evaluation, which continuously assesses needs and problems in the context to help

decision makers determine goals and objectives; input evaluation, which assesses alternative means for achieving those goals to help decision makers choose optimal means; process evaluation, which monitors the processes both to ensure that the means are actually being implemented and to make the necessary modifications; and product evaluation, which compares actual ends with intended ends and leads to a series of recycling decisions.

During each of these four stages, specific steps are taken:

- The kinds of decisions are identified.
- The kinds of data needed to make those decisions are identified.
- Those data are collected.
- The criteria for determining quality are established.
- The data are analyzed on the basis of those criteria.
- The needed information is provided to decision makers.

The context, input, process, product (CIPP) model, as it has come to be called, has several attractive features for those interested in curriculum evaluation. Its emphasis on decision making seems appropriate for administrators concerned with improving curricula. Its concern for the formative aspects of evaluation remedies a serious deficiency in the Tyler model. Finally, the detailed guidelines and forms created by the committee provide step by-step guidance for users. The CIPP model, however, has some serious drawbacks associated with it. Its main weakness seems to be its failure to recognize the complexity of the decision-making process in organizations. It assumes more rationality than exists in such situations and ignores the political factors that play a large part in these decisions. Also, as Guba and Lincoln (1981) noted, it seems difficult to implement and expensive to maintain.

The full-form of CIPP is Context, Input, Process and Product.

Context: Evaluation involves studying the reality in which the programme is run.

Input: Evaluation provides information for determining how alternative curricular strategies would be able to contribute to the attainment of curricular intentions. This component of evaluation examines things such as (i) appropriateness of selected objectives (ii) congruency between objectives and content (iii) appropriateness of the instructional strategies and assessment procedures.

Process: Evaluation examines the implementation aspect of the curricular programme.

Product: Evaluation using data about the three factors viz., context, input and process, the extent to which the objectives are being achieved and determined.

9.10.3. ROBERT STAKE'S CONGRUENCE-CONTINGENCY MODEL

Evaluation models are used in curriculum as a process for assessing the appropriateness of a curriculum for a context. As with approaches to curriculum evaluation, evaluation models can be divided into scientific and humanistic models. For the next few post we will look at scientific models of curriculum evaluation. Are first example is Robert Stake's Congruence-Contingency Model. This model emphasized on a full description of the educational programme and the curriculum process. Three sources of information are taken into account (i) Antecedents (ii) Transactions and (iii) Out-comes. Antecedents refer to conditions existing prior to teaching and learning. Transactions are the encounters in the learning situation and Out-comes take into consideration the intended as well as the unintended, which arise during the implantation of a programme. This model recognizes that multiple standards operated

depending on the educational setting, instructor and student. The recognitions of logical contingency between the antecedents, transactions and outcomes are an important feature of this model. The evaluator is making judgments regarding the programme based on the congruency between the intended and the observed aspects of the curriculum.

Congruence-Contingency Model

Stake's model of curriculum evaluation is more than just an evaluation process. Stake's model also looks at the development of the curriculum. When using this model, it is necessary to compare the developed curriculum with what actual happen in the classroom. There are six key terms, broken down into two groups of three that we need to know in order to understand Stake's model and they are as follows.

Development Stage

- Potential prerequisites
- Potential Curriculum
- Potential results

Evaluation Stage

- Prerequisites applied in context
- Evaluation of operational curriculum
- Actual results

Prerequisites

The prerequisites are another way of saying "before" or the state of the context before the intervention of teaching. This includes student's attitude, motivation, prior academic performance, teacher characteristics, and more. In the development stage, the teachers need to identify what are some potential prerequisites that may impact learning. In the evaluation stage, the evaluators determine what prerequisites actually impact the curriculum. In other words, there is a comparison of what was anticipated and what actually the case in terms of the prerequisites was.

Potential and Operational Curriculum

Potential curriculum is the "dream" curriculum that is developed. It includes everything that the teachers want to do. The Operational curriculum is what was actually used. There is normally a discrepancy between the two as it is difficult to cover all of the material and use all of the activities. The evaluation will examine the difference between these two aspects of curriculum as another criterion for assessing the quality of the curriculum.

Potential vs. Actual Results

Potential results are what the teachers hope to see as a result of the use of the curriculum. Actual results are the real performance of the students. The difference between the potential or desired results and actual results is another indicator of the quality of the curriculum in Stake's model.

Stake's Model provides evaluators with an opportunity to compare the desire outcome with the actual outcome. The benefit of this is that it is the curriculum developers that set the criteria of evaluation. All the evaluators do is determine if the curriculum performed in a manner that is consistent with the ideas of the developers.

CONCLUSION

Curriculum is the sum of total of all experiences to be provided to the learners and transacted by teachers. It can also define as the planned and guided learning experiences formulated through a systematic reconstruction of knowledge. The developed curriculum should be filtered through evaluation techniques. For this different models are to be employees and ultimately finalized. A good curriculum is the important one for the development of a child, system and finally for national development. There is no accepted theoretical base for the amount of stored experiments needed to determine the least

evaluation essences that must be used in recognizing the effectiveness of expand usage of new curriculum in educational system and every system should determine its evaluation standards according to its conditions.

Practice Activity

You have been nominated by your school head to evaluate the content of the mathematics syllabus used at your school. List the major steps you will take to achieve this.

The possible points to be included in your answer are provided at the end of this unit.

Summary

This unit helped you to understand what is meant by curriculum evaluation. The unit defined curriculum evaluation and described some approaches to this activity. Bureaucratic, autocratic, democratic, norm-referenced and criterion referenced evaluation have been cited as some of the approaches. The concepts of formative and summative evaluations were also explained briefly. Lastly, the methods ortechniques that can be used to evaluate the curriculum or syllabus were explained briefly.

Reflection

Based on the information provided in this unit, could you evaluate subjects in your school? If not, determine what additional information you require and conduct your own research into evaluation.

Unit Test

List what you should do when conducting a summative evaluation on a curriculum project such as the teaching of a foreign language.

Possible difference answers to this test are provided at the end of this unit.

Suggested Answers

Self-Assessment 1

According to Gatawa, curriculum evaluation can be used to:

- describe and judge educational programmes,
- compare students' performance with behaviourally stated objectives, and
- define and obtain relevant information for decision making purposes.

Self-Assessment 2

1. The following are the approaches to evaluations discussed in this unit:

- bureaucratic
- autocratic
- democratic
- criterion-referenced
- norm-referenced.

2. a. norm-referenced evaluation

b. criterion-referenced evaluation

Practice Activity

Steps that could be taken to evaluate the mathematics syllabus are below.

- Obtain a copy of the national goals and curriculum objectives.
- Review the objectives of the mathematics syllabus.
- Identify the expected outcomes of the syllabus.
- Obtain the students' test results in mathematics.
- Compare the intended outcomes with the actual outcomes.
- Ask other instructors, who teach mathematics to review, discuss and make recommendations regarding the syllabus.

Unit Test

In conducting a summative evaluation, you should:

- Examine curriculum objectives for teaching the language.
- Review the syllabus content for the language taught.
- Study records of students' performance to identify learning outcomes.
- Use appropriate methods or tools (for example, interviews and tests) to collect evidence on content and performance.
- Draft a final report that indicates the current status of teaching a foreign language and make recommendations that could be used to improve the teaching, if necessary.

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UNIT 10

CHANGE AND INNOVATION IN CURRICULUM

Introduction

Unit 9 discussed evaluation and how it is applied to the curriculum in order to determine the extent to which the curriculum objectives are achieved or realized. This unit will examine how the curriculum can be changed and how it can be improved. These processes are referred to as 'curriculum change' and 'curriculum innovation'.

Modifications introduced in the curriculum to improve or adapt it to new circumstances or priorities. This can be done through: minor adjustments that do not affect the curriculum structure; modernization to ensure that the curriculum remains current and relevant, reflects new developments in society and adequately prepares learners for life; innovation that brings new approaches and solutions; and large scale, system-wide reform that entirely reshapes the existing curriculum.

Objectives

After completing this unit, you should be able to:

1. Define 'curriculum change' and 'curriculum innovation'.
2. Identify the dimensions on curriculum innovation.
3. Identify and discuss models that explain how changes take place.
4. Explain factors that influence the planning and executing the change and innovation in the curriculum.

Content

This unit will cover the following topics:

- ❖ definitions of curriculum change and innovation
- ❖ dimensions on innovation
- ❖ models used in innovation
- ❖ factors influencing the planning and execution of change.

Curriculum Change

Hoyle defines change as embracing the concepts of innovation, development, renewal and improvement of a curriculum. Curriculum change is dictated by the changes in the economic, social and technological aspects of a society. Change has magnitude and direction and occurs within a definite time frame

Curriculum Innovation

Harris "an intentional and deliberate process to bring out desired effects and change". Curriculum innovation refersto ideas or practices that is new and different from those that exist in the formal prescribed curriculum.

Westerly (1969) and Richard (1965) (cited in University of Zimbabwe, 1995: 61), state that **curriculum innovation** is any improvement that is deliberate, measurable, durable and unlikely to occur frequently. It is the creation, selection, organisation and utilisation of human and material resources in ways that result in higher achievement of curriculum goals and objectives.

Perhaps you have come to realise that the difference between innovation and change lies in the fact that innovation is always planned while change may occur in response to external events. For any curriculum innovation to be meaningful and effective, it must be planned and organised. It is possible that other types of changes may occur when they are not planned.

10.1. DEFINITION OF INNOVATION OF CURRICULUM

Curriculum innovation is a modification of what was existing before the development of ideas practices, belief that are fundamentally new.

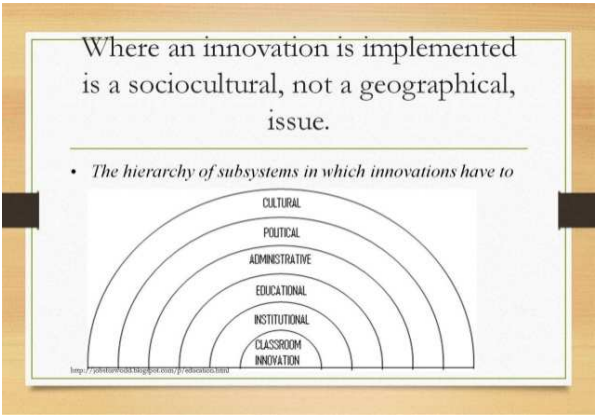
Innovation and change as different processes

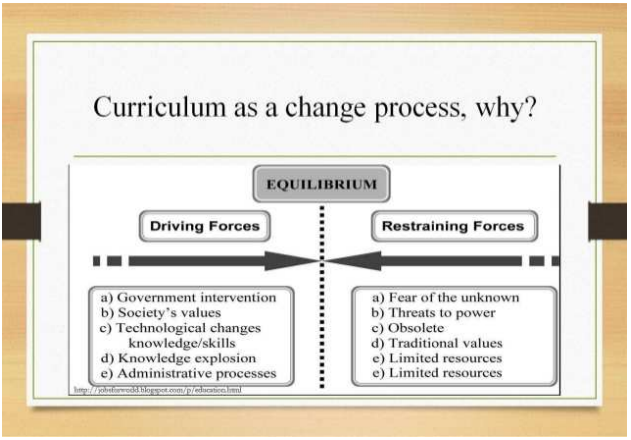
Change is an ongoing, almost unconscious process that involves reworking familiar elements into new relationship. Innovation is a willed intervention, which results in the development of ideas, practices, or beliefs that are fundamentally new (miles 1964; A Nicholls 1983).

Difference between Innovation and Change

Innovation: "New Curriculum" teaching the subject in new way.

Change: It will affect the subject being taught. An alternative book.





Self-Assessment 1

What is the difference between change and innovation?

The answer to this activity is provided at the end of this unit.

10.2. FACTORS INFLUENCING THE CHANGE IN CURRICULUM

The following are the factors affecting curriculum change that we hypothesise are significant:

A. Influential or outspoken individuals.

B. Financial pressures, including resource availability.

C. Staff availability or workload.

D. Employer or industry viewpoints.

E. Current or prospective student viewpoints.

F. Student abilities or limitations, or intake considerations.

G. Pedagogical argument, or academic merit.

H. University or Government requirement or regulation.

A. Influential or outspoken individuals.

Influential individuals Lachiver and Tardif (2002) explain key factors for change within their department.

The first factor initiating change, they write, is strong leadership accepted by the academic staff. The key characteristic of such leadership is to have the capacity to attract other academic staff to rally behind principled educational objectives that are supported within the environment.

The second factor is sharing and accepting the need for change, a point that is often stimulated by noting the discrepancies between the current output and what is desired by employers.

The extent of a curricular change, whether wide-scale or minor, is a third factor.

Finally, because many academic staff holds embedded teaching and professional practices, the degree of flexibility for departmental staff is seen as the final factor.

B. Financial pressures

Cost pressures can influence issues other than staff ratios. For example, a department or school might not be able to afford a site license for some software that students should perhaps experience, and so teach it at arm's length in lectures; similarly, a department might consistently allocate their oldest computing facilities for under graduateuse. This then might make it hard to run the most recent versions of software, or to assign project work of the desired complexity.

Another way in which financial pressures show is in the choice between three-year programs and four-year programs. Most of us believe that our four-year programs provides the higher-quality education. But four-year programs cost more, and so we supervise compromise programs in which students do not always have the opportunity to fully refine their skills before entering the workforce.

C. Staffing issues,

Staff shortages can mean that we narrow the range of subjects offered. One of the perennial decisions we face is best summarised as this: we identify a clear area of computer science that we do not cover, and probably should, and start talking about a new subject. But then someone asks who is willing to add to their teaching load to design and offer this subject, and the room falls silent. Many of our curriculum decisions are based upon the zero-sum policy, and if new material is to be included in particular year levels, then something else must be removed.

Surplus staff is a related issue. How many departments, we wonder, have continued teaching of outdated assembler languages simply because it was a skill of a particular staff member?

D. Employer and industry viewpoints

While the professional bodies ultimately reflect employer and industry expectations, these pressures are also sometimes directly exerted. Many Departments and Schools have an industry advisory committee, to allow a timely flow of such advice and suggestions. The success or otherwise of such committees is heavily dependent upon the energy and time that the industry representatives are able to bring to the task.

There is much anecdotal evidence that employers have strong opinions about the curriculum, usually requesting more emphasis on transferable skills (such as communication, social, analytical, and critical-thinking skills) in graduates, while feeling that these requests are not heard. University officials explain that many institutions are research based, and thus concentrate curricula on more theoretical work. And crowded curricula and scarcity of resources to implement changes contribute to the slow progress.

E. Student viewpoints

Students often assert that they are not customers; nevertheless, the customer is the one spending the dollar, and can sway decisions. However the staff teaching these subjects felt obliged to defend that choice to students, who saw their high school peers learning other more mainstream languages in their first semester at other institutions. Student opinion is informed by the mass media, and by the opinions of parents (also often derived from the media). Extensive negative coverage of the IT slow down had a marked effect on computing intakes in 2003, even though students commencing in 2003 will not graduate until the end of 2005, or later. Student choice continues to be determined primarily by personal interest.

F. Student abilities

In an ideal world, our programs would be dictated by our desires to create graduates of the highest possible calibre. And, were we capable of sourcing the correct raw material in sufficient quantity, perhaps we could achieve that goal. Unfortunately, the exigencies of filling quotas for both local and international students mean that the weaker students in our intakes sometimes do not meet our expectations in terms of maths or English skills, or in breadth of knowledge in other ways. Sometimes we take the path of least resistance, and design our curricula not for the excellent students that we remember many years later, but instead for the mediocre ones that muddle their way through our degree programs, never excelling and sometimes failing.

G. Pedagogical argument, academic merit

Many changes are proposed because they are an indisputably "good thing". One would find it hard to argue, for example, that the introduction of laboratory classes into a first programming subject that had previously been based solely upon lectures and tutorials was not a "good thing".

Similarly, we imagine that most readers would accept without question that third-year or fourth-year project based subjects are indispensable for students going into the computing industry.

H. University and government regulation

University Administrations increasingly push the case for efficient use of resources. While the number of programs offered in our discipline has been growing for a long time, and the closing down of programs is uncommon, there is usually considerable pressure to discontinue low-enrolment subjects. Such pressures can have impact on teaching methodologies in general, and many of us have been exposed to pressure to remove practical classes in some specific subject, or to remove tutorials altogether. The dislike within universities of employing large numbers of sessional staff is a potential further constraint on teaching practices.

10.3. DIMENSIONS OF CURRICULUM CHANGE

Curriculum change may be classified on a number of dimensions of change (Hoyle, 1972):

DIMENSION	RANGE
Rate	Rapid or slow
Scale	Large or small
Degree	Fundamental or superficial
Continuity	Revolutionary or evolutionary
Direction	Linear or cyclical

The following are the broad categories of curriculum change

- Introduction of a whole new degree program or specialised stream at the undergraduate level.
- Introduction of a whole new (course-work) degree program at the postgraduate level.
- Introduction of a new subject, or deletion of an existing subject.

- ❖ Change to or within a first-year or other core subject, such as a change to the first language taught to undergraduate students.
- ❖ Change to or within an elective subject, such as a change in the choice of AI language used in a third-year subject.

10.4. CONTEXT OF CURRICULUM CHANGE AND INNOVATION

Change and innovation in the curriculum are necessitated by factors in a country's political, social, economic, cultural and technological environments (University of Zimbabwe, 1995: 62). The education system changes in order to address these emerging needs and demands. Educational changes and innovations in most countries, including your own, are products of these factors.Designing a school curriculum for progressive learning opportunities should be informed by valid assessment data, be tailored to meet learners' needs, aspirations and personal development, and provide multiple means of representation, action and expression, and engagement.

Curriculum design should harness student's positive attitudes, ideas and imaginative capacities to support them to be co-creators of their own learning and to ensure it is personally meaningful and relevant. Curriculum design should be reviewed, evaluated and modified through a collaborative process of reflection to develop a partnership where children and young people participate actively in their own learning, monitoring of progress and assessment for learning. Curriculum should be planned for success with clearly articulated learning intentions, coupled with effective feedback and monitoring, and evaluated in partnership with students and practitioners. Curriculum planning should maximise opportunities for collaboration and participation in learning between families and practitioners and should include students' own views of their learning and engagement in assessment practices.

10.5. STRATEGIES AND MODELS OF CURRICULUM CHANGE AND INNOVATION

In order for change and innovation to succeed, the strategies for implementing the curriculum must be considered carefully. A strategy of innovation refers to the planned procedures and techniques employed in the quest for change. Harris et al. (1978), as cited in Curriculum Implementation (University of Zimbabwe, 1995), developed some models to explain how this takes place. Consider the ones outlined below and determine whether they are applicable to your situation.

Strategies

Participative Problem-Solving. This strategy focuses on the users, their needs and how they satisfy these needs. The system identifies and diagnoses its own needs, finds its own solution, tries out and evaluates the solution and implements the solution if it is satisfactory. The emphasis is on local initiative.

Planned Linkage. In this model, the intermediate agencies, such as schools, bring together the users of the innovation.

Coercive Strategies. These strategies operate on the basis of power and coercion by those in authority, using laws, directories, circulars and so forth. Ministries of Education usually use these strategies.

Open Input Strategies. These are open, flexible, pragmatic approaches that make use of external ideas and resources.

Models

Tanner and Tanner (1980: 262), as cited in Curriculum Implementation (University of Zimbabwe, 1995: 75), emphasise three principal models which illustrate how change takes place.

These are outlined below.

The Research, Development and Diffusion Model. In this model, an innovation is conceived at the head or centre and then

fed into the system. This views the processes of change as a rational sequence of phases in which an innovation is:

1. invented or discovered,
2. developed,
3. produced, and
4. disseminated to the user.

Problem-Solving Model. This model is built around the user of the innovation, who follows the steps below.

1. Determine the problem.
2. Search for an innovation.
3. Evaluate the trials.
4. Implement the innovation.

Social Interaction Model. In this model, change proceeds or diffuses through formal or informal contacts between interacting social groups. It is based on the following:

- ❖ awareness of innovation
- ❖ interest in the innovation
- ❖ trial
- ❖ adoption for permanent use.

The model stresses the importance of interpersonal networks of information, opinion, leadership and personal contact .

10.6. PLANNING AND EXECUTING CHANGE

You must note that for change to be implemented in the curriculum, a process has to take place. This process involves four major factors. According to Bishop (1986), cited in Curriculum Implementation .these factors include:

• **The change agent.** In your situation, change agents include teachers, school heads, local authorities or the Ministry of Education. The agent initiates the innovation or curriculum change in general.

- **The innovation.** This involves executing the change itself; that is, putting it into use or operation.
- **The user system.** This relates to the person or group of people at which the innovation is directed.
- **Time.** Innovation is a social process, which takes place over a period of time.

Always remember that these factors interact with change and are changed by each other during the process of innovation. It is also important to note that the curriculum change agent is involved with the process, the planning and the strategies, and is frequently the user of the innovation.

The Innovation Process

Innovation and change generally follow several logical steps:

1. Identify a problem, dissatisfaction or need that requires attention.
2. Generate possible solutions to the identified problem or need.
3. Select a particular solution or innovation that has been identified as the most appropriate.
4. Conduct a trial.
5. Evaluate the proposed solution.
6. Review the evaluation.
7. If the innovation has solved the identified problem, implement it on a wide scale.
8. Adopt and institutionalise the innovation or search for another solution.

Innovation Planning

Effective planning for innovation cannot take place unless the following elements are considered in the process.

- the personnel to be employed
- the specification of the actual task
- the strategy or procedure to be used to undertake thetask

- the equipment needed
- the buildings and conducive environment
- the costs involved
- social contexts
- time involved
- sequencing of activities
- rationale for undertaking the innovation
- evaluation of the consequences or effects of the innovation.

Conditions for Successful Implementation of Innovations

What conditions are necessary for users to implement the curriculum change or innovation successfully? Potential users of an innovation are more likely to accept it if the conditions below are met.

- The innovation must be relevant to them.
- It must be feasible in their particular organizational context.
- It must be compatible with the practices, values and characteristics of their system.
- It must be seen as posing little or no threat to the user group's identity, integrity and territory. The innovation must be shown to be tolerable and non-threatening.
- The innovation must yield material or non-material benefits. Gains in social status or recognition could be some of the non-material benefits.
- It must be flexible and adaptable.

10.7. RESTRUCTURING THE CURRICULUM

New Facilities and Equipment

Classrooms should be informal, allowing for multipurpose use. There should be seminar tables, carrels, work areas, and places to spread out for small group work.

Curriculum

The curriculum may be organized in any number of ways-around themes (magnets), special interests, alternative programs, or work in the community. It must develop interdisciplinary relationships and culminate in action or application activities if it is to be relevant to future needs.

Instruction

The expansion of instructional methodologies is an essential element of restructuring. Instruction must also begin with the frame of reference of the learner, be more explicit in outlining all of the steps necessary for learning, provide for different types of intelligence and learning styles, and focus on the processing of information rather than the memorization of facts.

School Management

School management must provide enough structure to ensure that children are learning and that the broad goals of the district are being met. It must also encourage greater freedom and autonomy for buildings and programs and enable staff and community to develop options at the building level.

These forms of restructuring are essential goals of preparing children and youth for a future society.

Individual Forces

A basic element of the restructuring of schools is that we must produce individuals who function at higher physical, emotional, and intellectual levels than most people do today. Life in a fast-moving technological society requires people who are skilled, flexible, able to tolerate stress and change, able to work collaboratively with others, yet able to maintain a strong sense of self. For persons with these characteristics, the next years are likely to be productive and fulfilling. For persons without these skills, life may be stressful and frustrating.

Organizational capital will be achieved not by designating a few schools as site-based management schools, but by an in-depth restructuring of organizations and empowering of staff to provide a better and more satisfying quality of organizational life.

Responses to Restructuring

Many have been aware of the need for the restructuring of schools but have not been clear about how to approach the problem. Three major approaches have been used in restructuring. These are bringing the community to the school; restructuring the bureaucracy; and redesigning students' educational experience. Each is described below.

Bringing the Community to the School

Much of the initial educational restructuring grew out of strategic planning models that had been applied to education. Educators were aware that the support for schools has declined, largely as a function of the decline in households with school age children. In the 1950s, one out of two households had a school age child; today, it is one out of five. This decline has been a factor in the decreased support of schools.

Many looked at the community and began to realize the needs for services that schools could fulfill. New programs for new client groups were established to meet community needs. Some of the most obvious services schools could provide were early childhood education and latchkey programs. Services for senior citizens, adult job training, adult education, and a variety of other activities have opened the school to the community. The extension of this model is a learning community where persons of all ages are interacting in learning programs. The school is not simply a multifunction building but is a center where a wide variety of interactive, intergenerational programs are provided that can extend the learning of all groups.

Variations of this restructuring approach are found in business-partnerships, school without walls, business-based programs, and a number of other approaches.

The basic goals of this form of restructuring are related to the need for:

- ❖ Maintaining a sense of relevance to the needs of the community;
- ❖ Putting the school into the mainstream of the community;
- ❖ Increasing learning resources (human and fiscal); and
- ❖ Expanding the general support base for the schools.

Restructuring the Bureaucracy

A second and perhaps the most commonly understood meaning of restructuring is opening up the bureaucracy and decentralizing by allocating more power and autonomy at the building level. The movement known as site-based management is based on the recognition that a standardized, cookie-cutter approach to schools is not likely to meet student, staff, or neighborhood needs.

Site-based management is one of the needs that must be addressed in restructuring of schools. Too frequently, however, it is approached as a panacea without an overall understanding of the related changes which must be made if it is to be successful.

Site-based management requires a new set of organizational structures and relationships. The role of nearly everyone in the system is changed, and attention must be given to helping people learn new role behaviors. Site-based management inevitably requires a redistribution of power, and people must learn participative and inclusive management skills if it is to be successful.

Some have been encouraged by the initial successes of site-based management demonstrations. In these instances, the

success can usually be traced to the knowledge and skills of a gifted principal. There will undoubtedly be a productivity increase when persons with unusual skills (less than 20% of administrators) move into a new freedom. If site-based management is to be an integral and ongoing characteristic of all schools, much work will be needed in individual and organizational development.

Restructuring the Teaching/Learning Process

Many have realized that while bringing the community into the school and redesigning the bureaucracy have many positive values, neither of these processes addresses the restructuring of the teaching-learning process in a direct way. Both approaches could be carried out successfully with benefits to the community and school staff, but little would be changed at the classroom level.

The restructuring at the classroom level must be based on the understanding that high levels of learning require a systematic and intense affective and cognitive interaction between teacher and students. It is the quality and intensity of this relationship that facilitates student learning. If this is to be provided to students, teachers likewise must have higher levels of emotional, physical, and fiscal support. In a sense, it is the task of everyone in the school and community system to support the teaching-learning process in the classroom in productive ways.

Examples of the key principles to be incorporated into the restructuring of the teaching/learning process include the following:

- All learning begins with the affective; strong interpersonal skills provided to children in an equitable way are necessary preconditions for affective learning;
- Language development is the essential element for academic and life achievement; all effective teaching must focus on the explicit teaching of vocabulary and conceptual understandings;

- ❖ Instructional methods are culturally and experientially biased; teaching heterogeneous groups of students requires the systematic use of instructional methods that meet the varied needs of children;
- ❖ There is a systematic sequence of instruction that is essential if all children in the class are to learn; this requires a systematic provision of review, overview, presentation, exercise, and summary;
- ❖ Teaching students how to process information requires an interactive, process approach to learning; teaching must help students understand their own thoughts and creativity through speaking and writing; and
- ❖ A major task of educational programs is to extend the world view of the child; this should include a view of careers, of the community, of our nation and our global community.

These principles can be applied in any number of ways-for example, as magnet schools, community schools, ungraded schools, middle schools, alternative schools, or schools within schools. While the structure of the program can be designed in a variety of ways, there must be a core understanding and implementation of the principles outlined above.

Principles for Restructuring

The implementation of any of these three approaches to restructuring is likely to produce positive benefits. There is, however, the consideration that none of the approaches is likely to result in the level of change that is desirable. If schools are truly to be restructured, they must:

- ❖ Be related to changes and needs in the community and society;
- ❖ Include the organizational restructuring of the school system itself; and
- ❖ Focus on the restructuring of the teaching-learning process.

A comprehensive approach to restructuring must involve each of these three areas. The goal of the restructuring is to find a "fit" between the community, the school system, and the teaching-learning process. (See the following illustration).

Finding this fit among the three areas of restructuring is likely to ensure that the effort has dealt with three essential components for educational excellence-relevance, effectiveness, and efficiency. Knowing the community and society and responding to the forces for change begins to establish the basis for relevance and for preparing children and youth for a future society. Opening up the bureaucracy and empowering staff and students begins to offer the basis for effectiveness in providing a structure for learning. Lastly, change in the classroom provides the means for ensuring efficiency by increasing the quality and quantity of learning.

Schools may begin the restructuring process in a single area or develop comprehensive plans. Either approach has strengths and problems which must be addressed. What cannot be done is to ignore the need for change and transformation. Change must occur if schools are to achieve their contract with society to prepare children and youth for a future world.

Self-Assessment 2

List the strategies for curriculum change and innovation.

Answers to this activity are provided at the end of this unit.

Practice Activity

Assume that your school will shortly introduce computer assisted instruction. What would you identify as the agents of this innovation?

Suggested answers to this activity are provided at the end of this unit.

Conclusions

Innovation is a time bound phenomenon, and change is always constrained by socio cultural factors, individuals' psychological profiles, and the attributes that potential adopters perceive a given innovation to posses. Curricular innovation is a managed process of development whose principal products are teaching (and/or testing) materials, methodological skills, and pedagogical values that are perceived as new by potential adopters. Changes in teaching (and/or testing) materials, methodological skills, and pedagogical values constitute the core dimensions of teaching and learning.

Summary

Curriculum change and innovation were the two inter-related concepts that were reviewed in this unit. In addition, we covered:

- ❖ sources of curriculum change and innovation,
- ❖ how to plan and execute change,
- ❖ the innovation process, and
- ❖ the conditions necessary for implementing change and innovations successfully.

Reflection

This unit presented numerous terms and definitions related to the implementation of changes and innovations. Rather than trying to remember all of them, focus on a particular change that you would like to implement and note the factors that you must take into account and the steps you must follow if your implementation is to be a success.

If you note changes that could benefit your students, make the effort to bring about the changes. Remember that many classroom changes start with you!

Unit Test

1. Innovations can be successful if they are planned effectively.

What elements or resources are needed in order to ensure that the implementation is a success?

2. What are the basic steps involved in implementing any significant change?

Suggested answers to these questions are provided at the end of this unit.

Suggested Answers

Self-Assessment 1

The difference lies in the fact that innovation is always planned and organised, while change can be either planned or unplanned.

Self-Assessment 2

Strategies that could be used to implement curriculum change include:

- participative problem-solving strategy
- planned linkage strategy
- coercive strategy
- open input strategy.

Practice Activity

The agents of change could be:

- the school head
- the school community
- the teachers
- the school environment
- the students.

Unit Test

1. Some of the elements that are necessary for effective planning to occur are listed below.

- procedures or steps to be followed during implementation

- human resources to plan and implement the innovation
- material and equipment resources to support the plan
- money to cover expenditures
- local and high-level education support
- adequate time to implement the plan
- evaluation procedures that will help you determine whether your plan is proceeding as expected or if there are unexpected benefits of your innovation.

2. The basic steps involved in making any significant change are outlined below.

- Identify the problem or concern.
- Generate possible solutions.
- Select a particular solution.
- Try the solution.
- Evaluate the solution formatively and summatively.
- Review the outcomes of the trial.
- Implement the solution on a wide scale.

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