

# Curriculum Studies



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## I. Curriculum Studies

by Dr. Grace Nyagah

## II. Prerequisite Courses or Knowledge

None; But the following courses would be useful:

History of Education

Philosophy of Education

General Psychology

Developmental Psychology

## III. Time

Total time for the module is 120 hours. The distribution per unit is as follows:

Unit I: 25 hours

Unit II: 20 hours

Unit III: 30 hours

Unit IV: 15 hours

Unit V: 15 hours

Unit VI: 15 hours

## IV. Materials

Simulated materials on CD/Video/DVD

Recommended textbooks, including web-based materials

## V. Module Rationale

Curriculum constitutes the core of the teaching-learning process. This module is central in preparing you, the student, teacher in the theory and practice of curriculum. It empowers you in curriculum concepts, issues and processes at various levels of education. These levels are *macro* (global and national), *meso* ie. regional, school and departmental; and *micro* ie. the classroom. Through studying this module, you, the student teacher, becomes acquainted with the processes involved in developing curriculum in the various subjects and would therefore be better prepared for effective teaching. Issues regarding teaching and the teaching profession are highlighted, given that teachers are the main implementers of curriculum.



## **VI. Content**

### **6.1 Overview**

This module examines the concept of curriculum and its place in the teaching learning process, highlighting the theory and practice. The determinants of curriculum are explored including the historical, philosophical, sociological and psychological foundations. Further, political issues and technological factors influencing curriculum as discussed. Thereafter, issues on the curriculum design, curriculum development process, implementation and evaluation processes are presented.

Curriculum change and innovation is explored and teacher education and secondary school curriculum are discussed.

#### **Unit I Definition and Meaning of Key Concepts in Curriculum Studies**

Meaning of Education

Definitions of the Curriculum: Broad and specific

Elements of Curriculum

Scope of Curriculum studies

Aims, goals and objectives

#### **Unit II Foundation of Curriculum**

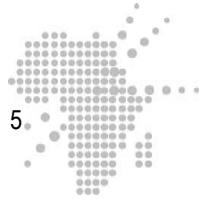
Historical, philosophical, sociological and psychological foundations of curriculum;

#### **Unit III Curriculum Design, Development and implementation.**

#### **Unit IV Curriculum Evaluation**

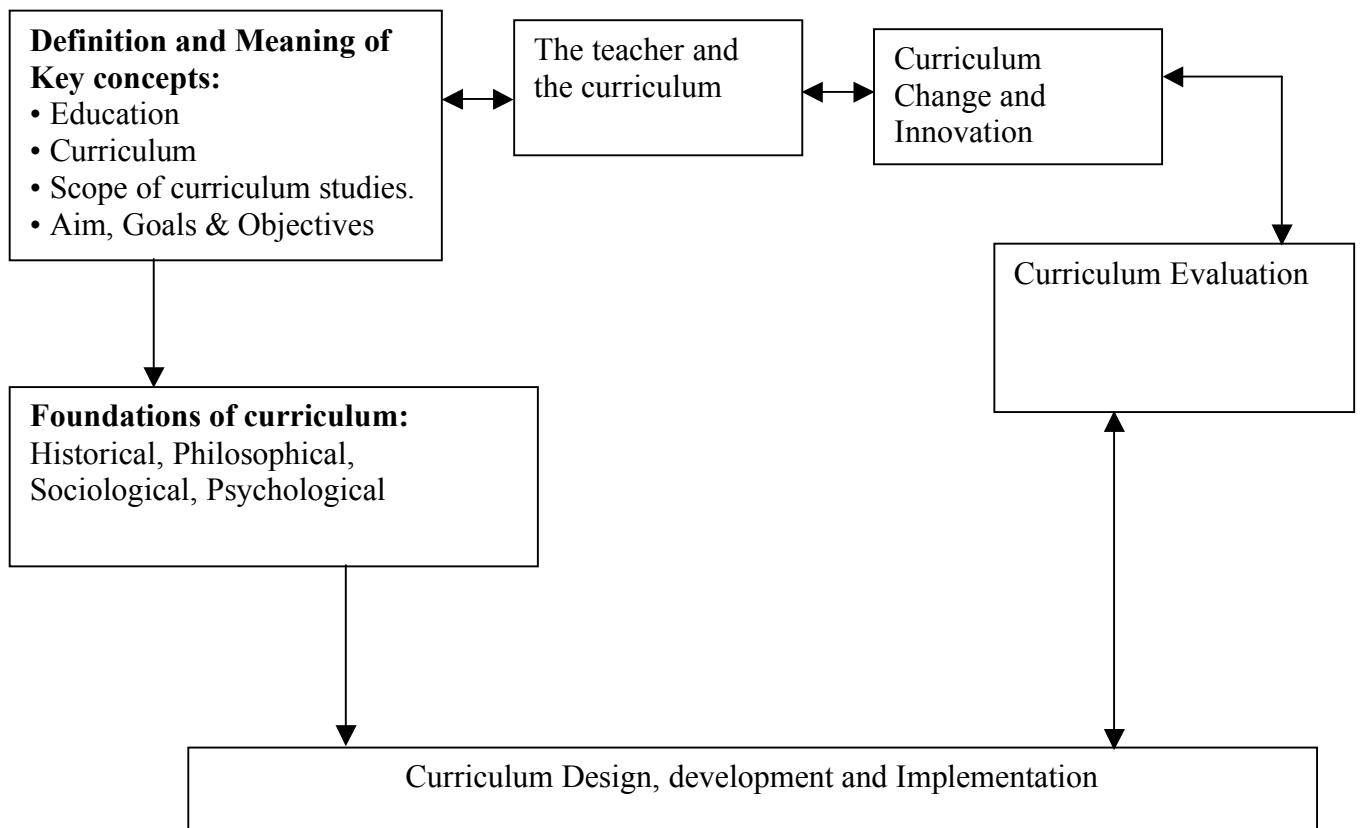
#### **Unit V Curriculum Change and Innovation**

#### **Unit VI The Teacher and the curriculum**



6.2 Graphic organizer

**Curriculum Studies Module**





## VII. General Objectives

- To develop the needed knowledge and skills in planning, developing, implementing and evaluating curriculum in various countries.
- To gain insight into the concepts of curriculum and develop an understanding of the issues that impact upon educational practices
- To engage in the various definitions and conceptualizations of curriculum
- To develop insight into the application of curriculum concepts to current schooling practices
- To develop the needed knowledge and skills in planning, developing, implementing and evaluating curriculum in various countries.

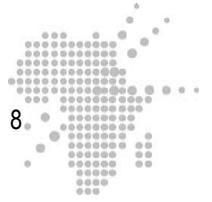
## VIII. Specific Learning Objectives (Instructional Objectives)

Unit	Learning objective(s)
1. Definition and Meaning of Key Concepts in Curriculum Studies	By the end of the unit the student teacher should be able to: <ul style="list-style-type: none"> <li>- Define the terms: education, curriculum,</li> <li>- Identify functions of education</li> <li>- Explain the scope of curriculum studies</li> <li>- Describe what curriculum theory is</li> <li>- Differentiate between aims, goals and objectives</li> <li>- Differentiate the various dimensions of the school curriculum</li> </ul>
2. Foundations of curriculum	By the end of the unit the student teacher should be able to: <ul style="list-style-type: none"> <li>- Distinguish the various foundations of curriculum</li> <li>- Explain the contributing influence of various foundations in the process of curriculum development</li> </ul>



3. Curriculum Design, Development and Implementation	<p>By the end of the unit the student teacher should be able to:</p> <ul style="list-style-type: none"> <li>- To explain the concept of curriculum design</li> <li>- Discuss the various curriculum design models</li> <li>- Identify processes involved in curriculum development</li> <li>- Explain the process of Curriculum implementation process</li> </ul>
4. Curriculum Evaluation	<p>By the end of the unit the student teacher should be able to:</p> <ul style="list-style-type: none"> <li>- Define the term evaluation</li> <li>- Explain the nature and purpose of evaluation</li> <li>- Distinguish between monitoring and evaluation</li> <li>- Describe various types of evaluation</li> <li>- Distinguish between monitoring and evaluation</li> <li>- Describe various types of evaluation</li> <li>- Explain the criteria for evaluation</li> <li>- Discuss various approaches to evaluation</li> </ul>
5. Curriculum Change and Innovation	<p>By the end of the unit, you should be able to:</p> <ul style="list-style-type: none"> <li>- Differentiate between change and innovation.</li> <li>- Describe the curriculum innovation process</li> <li>- Explain the criteria for judging the value of curriculum innovation</li> <li>- Discuss models of curriculum innovation.</li> </ul>
6. The teacher and the curriculum	<p>By the end of the unit you should be able to:</p> <ul style="list-style-type: none"> <li>- Define the term teacher and teacher education</li> <li>- Identify important qualities of a good teacher</li> <li>- Discuss the extent to which teaching approaches an ideal profession</li> <li>- Discuss conditions for effective teaching and learning.</li> </ul>





## IX. Teaching and Learning Activities

### Title of Pre-assessment

#### CURRICULUM STUDIES PRE – ASSESSMENT TEST

This test is designed to assess your knowledge on the concepts covered in curriculum studies.

**Rationale:** The level of performance you display in this test will help you and your instructor to understand where to put emphasis while studying this module.

### Questions

1. Which of the following dimensions of education is predominant in the school system?
  - A. Formal
  - B. Informal
  - C. Non – formal
  - D. None of the above
2. Which of the following terms is acceptable to use in writing behavioural objectives?
  - A. To identify
  - B. To know
  - C. To understand
  - D. To appreciate
3. Which of the following is NOT a ‘screen’ for educational objectives?
  - A. Psychology of learning
  - B. Learners needs
  - C. Social values
  - D. Psychology of education



4. Which of the following is NOT a criterion for selection of content for curriculum?
  - A. Validity
  - B. Utility
  - C. Needs and interests of learners
  - D. Scope
5. The term scope refers to:
  - A. The way in which learning experiences are ordered in the curriculum
  - B. The breadth and width of the curriculum
  - C. Blending fusion or unification of disciplines
  - D. Horizontal relationships or curriculum experiences
6. Which of the following courses represents a broad fields curriculum
  - A. Physics
  - B. Maths
  - C. Astronomy
  - D. Environmental Education
7. What would you consider as NOT a good characteristic of instructional objectives?
  - A. Measurable
  - B. Attainable
  - C. Specific
  - D. Comprehension
8. According to Benjamine Bloom, which of the following is NOT one of the domains of educational objectives?
  - A. Cognitive
  - B. Affective
  - C. Contemporary?
  - D. Psychomotor
9. The subject centred approach to organising learning experiences is disadvantageous because the design:
  - A. Brings out high degree of fragmentation of knowledge
  - B. Lacks integration of content
  - C. Stresses too much on the interests of the learners
  - D. Assumes transfer of information learned into everyday life situation



10. Which of the following method/approaches is NOT a good way of sequencing learning experiences?
  - A. From simple to complex
  - B. Using chronological order
  - C. From abstract to concrete
  - D. From particular to general
11. What factors are part of the social forces that influence the curriculum?
  - A. needs of individual learners
  - B. cultural background, family and technologies
  - C. nature of learning and nature of knowledge
  - D. the knowledge of human development
12. What are some of the diversity factors that affect curriculum design?
  - A. ethnicity, religion, gender and language
  - B. different grade levels and age
  - C. socioeconomic status and grade level
  - D. disabilities and amount of students in the classroom
13. What are the bases of curriculum planning?
  - A. relevance, field experiences, and higher standards
  - B. social forces and human development
  - C. social forces, human development, nature of learning and nature of knowledge
  - D. improved curriculum and instruction
14. What are some of the background characteristics that determine student achievement?
  - A. cultural background and socioeconomic status
  - B. prior knowledge of use of technology
  - C. changing values and morality
  - D. lack of purpose and meaning
15. What is the primary role of teachers?
  - A. Be a good role-model
  - B. curriculum designer
  - C. curriculum designer and implementor of instruction
  - D. implementor of instruction



16. Which of the following is NOT a criteria for selection of subject matter.
  - A. Significance
  - B. Validity
  - C. Utility
  - D. Scope
17. Which of the following is NOT a traditional philosophy?
  - A. Idealism
  - B. Realism
  - C. Existentialism
  - D. Perennialism
18. The main proponent of pragmatism as a philosophy that would impact on education was:
  - A. Jeanne Piaget
  - B. Ivan Pavlov
  - C. John Dewey
  - D. Benjamin Bloom
19. Non formal Curriculum is:
  - A. Indirect messages from the learning environment
  - B. Written document specifying what is to be taught
  - C. What is not taught in the school set-up
  - D. Learning planned outside the formal learning system
20. Which of the following is NOT a criteria for judging the worth of curriculum innovation
  - A. Balance
  - B. Relative advantage
  - C. Compatibility
  - D. Observability



### **Multiple choice answers**

1. A
2. A
3. B
4. D
5. B
6. D
7. D
8. D
9. C
10. C
11. B
12. A
13. C
14. A
15. C
16. D
17. C
18. C
19. D
20. A

### **Pedagogical Comment for Learners**

The content of this module is likely to be fairly new to you. Therefore if you score 50% and above, you can consider yourself to have a good foundation for the course. If you however score 25% and below, then you will need to put extra effort in the course. Whatever your status, welcome to the module and I believe with your commitment you will do well in the course.



## X. Key Words (Glossary)

- Education - Process of acquiring desirable knowledge and skills and attitudes.
- Curriculum - A course of study.
- Curriculum Theory - A set of related statements that give meaning to school curriculum.
- Aim - A statement that guides and directs educational planning
- Goal - A statement that provides ultimate destination
- Objective - A statement of performance to be demonstrated, stated in measurable and observable terms
- Assessment - Process to check if there is a change in learners behavior.
- Measurement - Means of determining the degree of achievement of a particular objective
- Testing - Use of instruments for measuring achievement.
- Curriculum design - The structure or pattern of organization of the curriculum.
- Curriculum design model - A set of ways to arrange curriculum.
- Curriculum development - An activity which results in plans for instruction.
- Curriculum implementation - Actual operationalization of the curriculum in schools.
- Curriculum evaluation - Process of establishing the extent to which curriculum objectives have been achieved
- Curriculum Change - A shift in position of a curriculum due to perceived need or unforeseen circumstances
- Curriculum Innovation - Introduction of something new that deviates from the standard practice.
- Teacher - Any person who is responsible for the education of pupils
- Teaching - Giving instruction to somebody
- Teacher education - a process by which an individual gains knowledge or insight or develops skills and attitudes that would enable him/her to perform the art of teaching effectively
- Curriculum foundation - The basis upon which curriculum is developed
- Historical foundation - Factors and issues from the past that influence curriculum at present
- Philosophy - search for truth; pursuit of wisdom or knowledge
- Sociological foundation- Issues from society including groups and institutions in the culture and their contribution to education
- Psychological foundation- Includes insights gained from the field of psychology that have a bearing on the learning process and consequently the curriculum

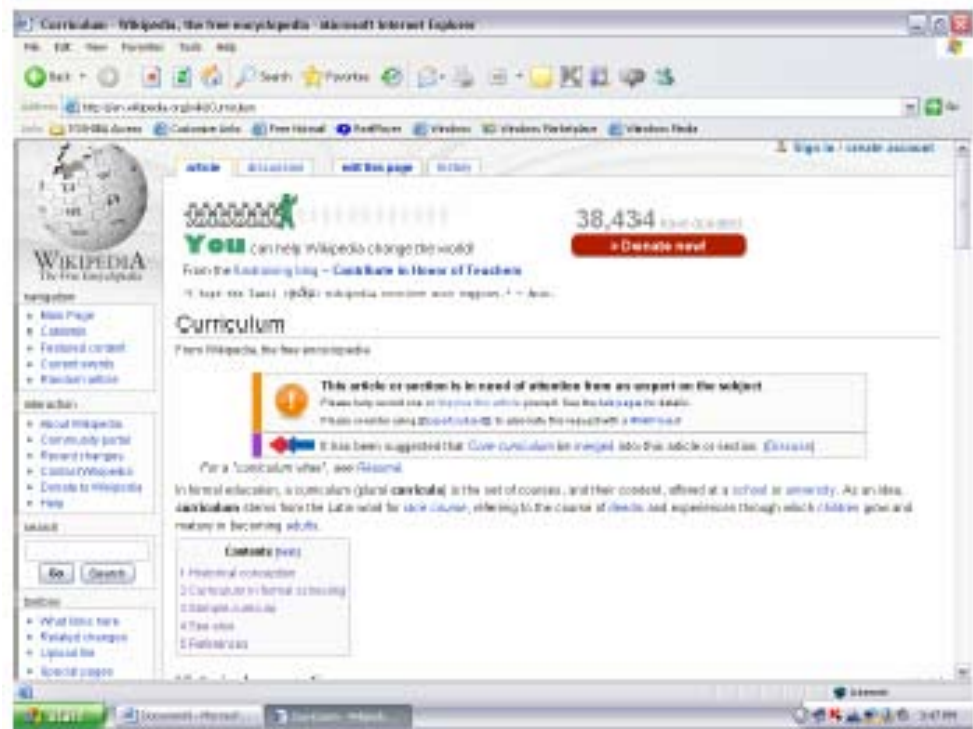


## XI. Compulsory Readings

### Reading # 1 Curriculum

Complete reference : <http://en.wikipedia.org/wiki/Curriculum>

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#### Description

The article provides clear definitions and explanations of the concept of curriculum. It also brings out the historical perspective of the concept, which makes it easier to comprehend. Other scholars e.g. John Dewey's perspective of the term is highlighted. Curriculum in formal schooling in different countries is presented.

#### Rationale

This module, curriculum studies cannot be comprehended without adequate understanding of the key concept of curriculum. Presentation of the various explanations is therefore useful for the student teacher.

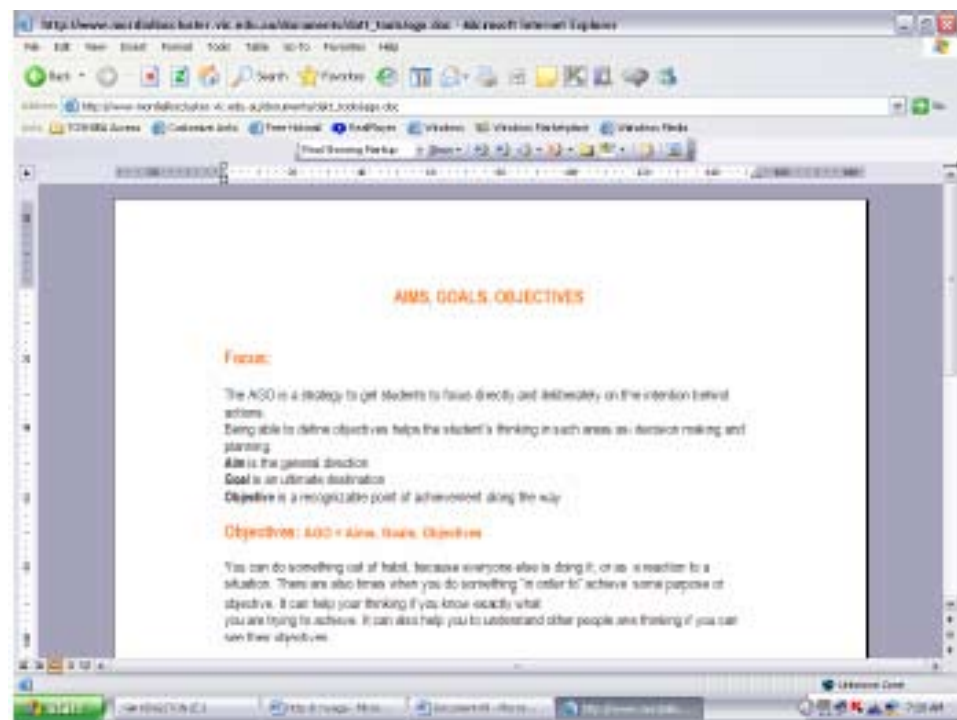


## Reading # 2 Aims, Goals and Objectives (AGO)

### Complete reference

[http://www.mordialloccluster.vic.edu.au/documents/datt\\_tools/ago.doc](http://www.mordialloccluster.vic.edu.au/documents/datt_tools/ago.doc)

### Screen Capture



### Description

Aims, Goals and Objectives (AGO) is an important strategy to assist the students focus on what they need to do in the learning process. Differences between aims, goals and objectives are clarified. The principles associated with objectives are enumerated; e.g. “If you know exactly what your objectives are, it is easier to achieve them”.

### Rationale

A curriculum must have clearly stated aims, goals and objectives. These form the basis of

deciding on the content, delivery methods and evaluation procedures. They are a very important component of curriculum. Hence the need for this reading.



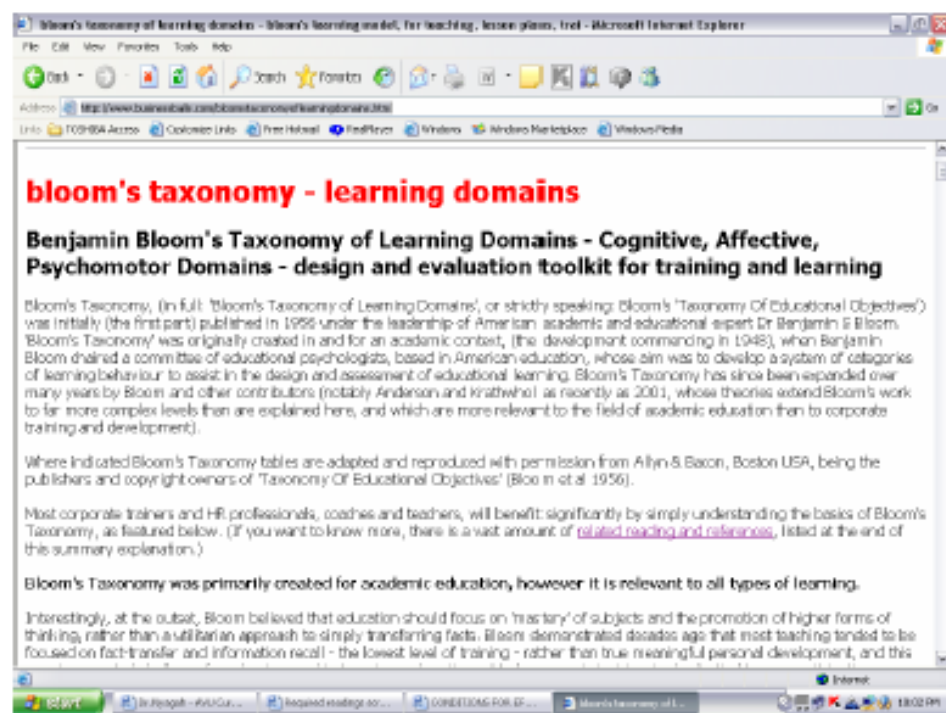


### Reading # 3      Blooms Taxonomy of Educational Objectives

#### Complete reference

<http://www.businessballs.com/bloomstaxonomyoflearningdomains.htm>

#### Screen Capture



#### Description

This article brings out a bit of historical development of the work of Benjamin Bloom. It highlights the importance of objectives in education and training. The various domains are presented: cognitive (intellect), Affective (feelings & emotions) and Psychomotor (physical skills). The categorisation of the taxonomic levels of knowledge, comprehension, application, analysis, synthesis and evaluation is dealt with clearly.

Terminologies appropriate for use at each level are also provided.

#### Rationale

Blooms taxonomy is very important in writing objectives. It assists curriculum developers and teachers in ensuring that all aspects of developing learners especially at higher levels of thinking and operation are catered for in the learning process. The presented information makes objectives writing, often a difficult task, much easier and hence the value of this article.



## Reading # 4 Curriculum Design Model and the Enlightenment

**Complete reference:** <http://asterix.ednet.lsu.edu/~lsuctp/confpapers/Wang.htm>

### Screen Capture



### Description

The article emphasizes on the importance of curriculum design in curriculum studies. It points out that decisions on curriculum design are made at two levels; “the choice of the basic value” e.g. attitudes, to guide the process and the “practical aspect”, including management and implementation of curriculum components. Typical curriculum designs are presented;

Discipline – Centred, Learner Centred and Problem Centred Designs.

Application of the topic in a specific country, China is presented; “Reflections on the innovation of curriculum Design”

### Rationale

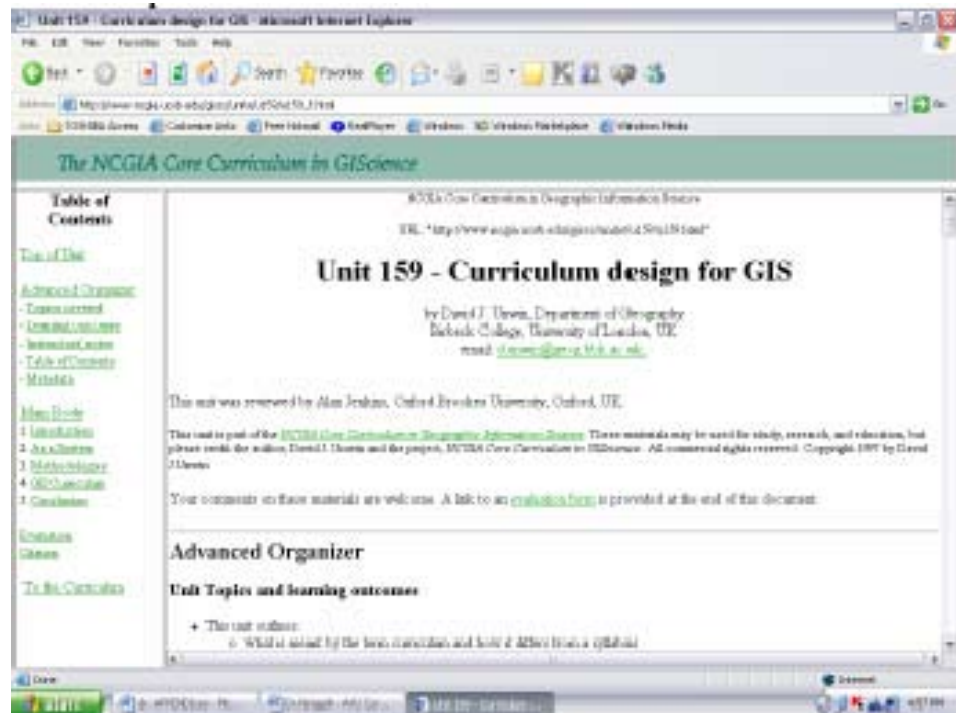
Curriculum design is fundamental to the curriculum development process and other aspects of curriculum. It is therefore an important article for the student teacher. The application of the concepts in China is an added advantage to help the learners appreciate the practical aspect of the topic.



## Reading # 5 The NCGIA Core Curriculum in GIScience

**Complete reference:** [http://www.ncgia.ucsb.edu/giscc/units/u159/u159\\_f.html](http://www.ncgia.ucsb.edu/giscc/units/u159/u159_f.html)

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### Description

This article is based on a curriculum for Geography Information Science. The article begins with expounding on the meaning of curriculum. Curriculum design methodologies are discussed, with the key questions that need to be answered presented; including 'What' 'Why' and 'How' questions. Approaches presented include: design through aims and objectives; by subject matter; for resource availability etc. In all cases, the processes are tied to the specific subject – GIS.

### Rationale

Although this article is specific to GIS, it is well written and highlights a lot of aspects of the module including revisiting the meaning of curriculum, analysing elements of curriculum. It also presents various methodologies of designing curriculum. This practical application of the theories of designing are useful in comprehending these important concepts.

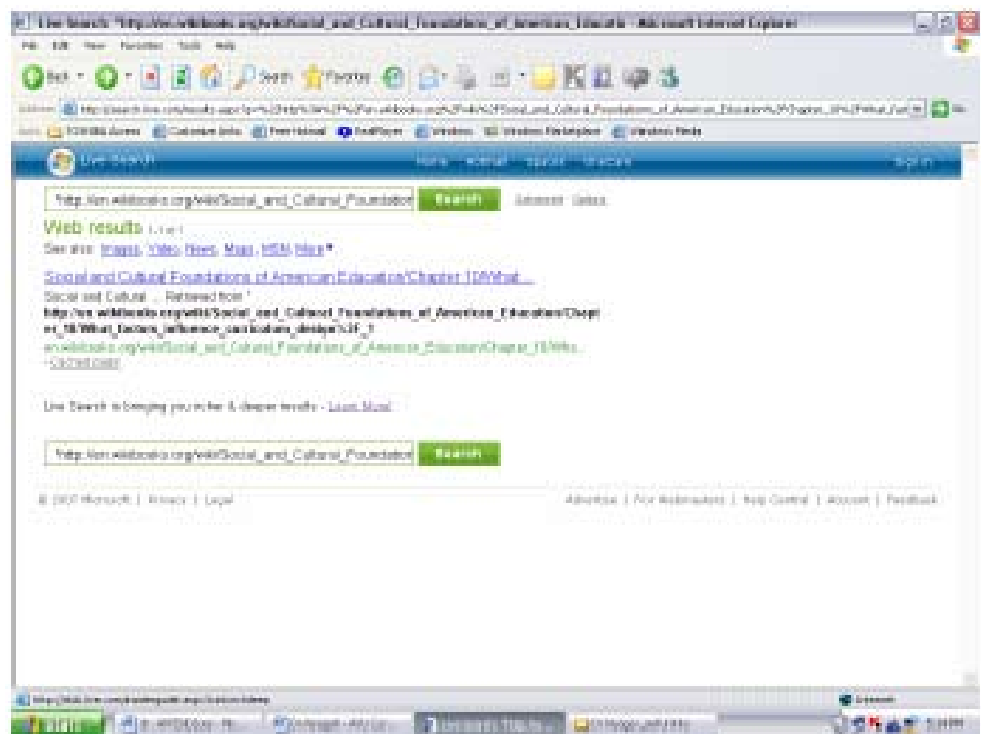


## Reading # 6 What factors influence Curriculum Design

### Complete reference

[http://en.wikibooks.org/wiki/Social\\_and\\_Cultural\\_Foundations\\_of\\_American\\_Education/Chapter\\_10/What\\_factors\\_influence\\_curriculum\\_design%3F\\_1](http://en.wikibooks.org/wiki/Social_and_Cultural_Foundations_of_American_Education/Chapter_10/What_factors_influence_curriculum_design%3F_1)

### Screen Capture



### Description

Some of the factors that influence curriculum design are presented including teachers' individual characteristics, application of technology, students cultural backgrounds and socio-economic status, and classroom management. The interplay of all those factors is considered important. However, the emphasis in conclusion is that teachers should make sure curriculum serves as a catalyst for powerful learning for students, to become skilled in and committed to the process of learning.

### Rationale

The article points to the students some of the variables at play in curriculum design and their importance. This is useful in that curriculum design and development are complex concepts that need as much exploring of the different angles as possible. This is crucial for student teachers.



## Reading # 7 Curriculum Development Process

### Complete reference

<http://www.eed.state.ak.us/TLS/FRAMEWORKS/langarts/1intro.htm>

### Screen Capture



### Description

The article's discussion is based on a system of education in Alaska. The focus of curriculum development is at the district level. The use of committees for curriculum development is emphasized. The responsibilities of the committees are given, including: research on effective practices; review of policies; considering professional development activities to support the curriculum.

Various assumptions to be considered in curriculum development are presented, e.g., what students should know; be able to do; etc. Issues to consider to ensure success are presented, including, "creating a functional and collaborative process and identifying the resources available."

### Rationale

Though the setting is specific to a developed country, the ideas presented can be adopted for curriculum development in African countries. It is well detailed and therefore informative for the student teachers.



**Reading # 8      Change Issues in Curriculum and Instruction / The Teacher as Learner and the Learner as Teacher**

[http://en.wikibooks.org/wiki/Change\\_Issues\\_in\\_Curriculum\\_and\\_Instruction/The\\_Teacher\\_as\\_Learner\\_and\\_the\\_Learner\\_as\\_Teacher](http://en.wikibooks.org/wiki/Change_Issues_in_Curriculum_and_Instruction/The_Teacher_as_Learner_and_the_Learner_as_Teacher)

**Description**

This article presents the notion that the traditional approaches to education have changed over time with learners becoming active participants. Hence, the need for teachers to become perpetual learners; “who dares to teach must never cease to learn” J. C. Dana. Given the change of instructional delivery from previous static mode to a dynamic process, teachers need to learn constantly from their own practice. Learners too have to be trained not to be passive recipients but to being active learners and ‘teachers’. Involving various stakeholders in facilitating learning is crucial, including communities.

**Rationale**

This article is important in having student teachers realize the importance of changes of approach to the current status of dynamism. For many of the trainee teachers who may have studied through traditional approaches, this article is an eye opener of what is expected of them in the 21<sup>st</sup> Century.

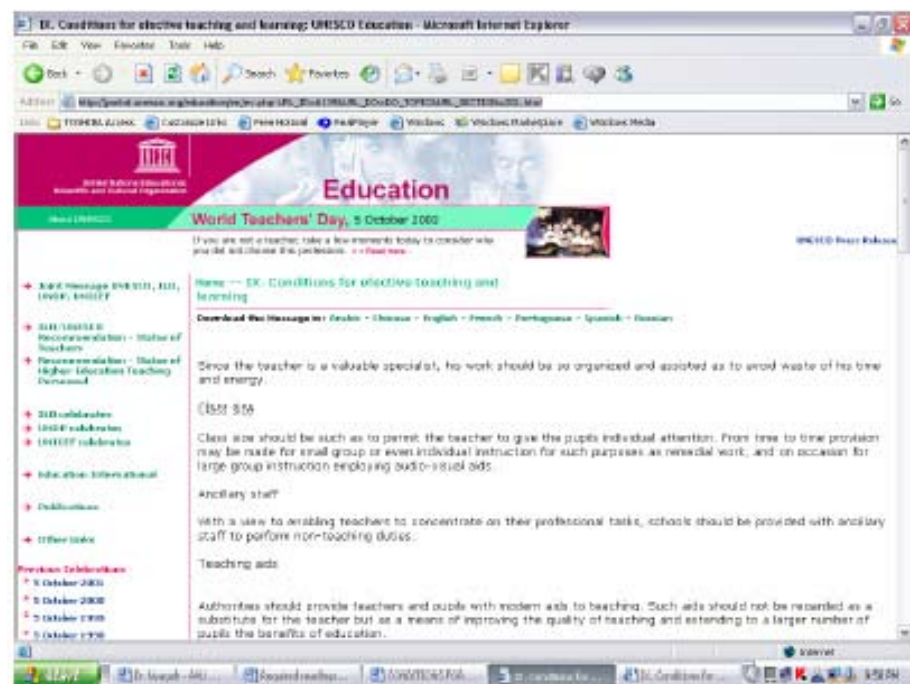


## Reading # 9 Teacher Education

### Complete reference

[http://portal.unesco.org/education/en/ev.php-URL\\_ID=6139&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/education/en/ev.php-URL_ID=6139&URL_DO=DO_TOPIC&URL_SECTION=201.html)

### Screen Capture



### Description

The meaning of teacher education is provided as well as the various types of teacher education. These include initial teacher education, induction, and teacher development. Ways of organizing teacher education; Consecutive and concurrent programmes are briefly explained. Additionally, curricula for teacher education are described while supervised field experiences are well discussed.

### Rationale

Teacher Education (TE) is crucial in preparing the main implementers of curriculum, the teachers. Understanding what is involved in TE is therefore crucial for the student teacher in this module.

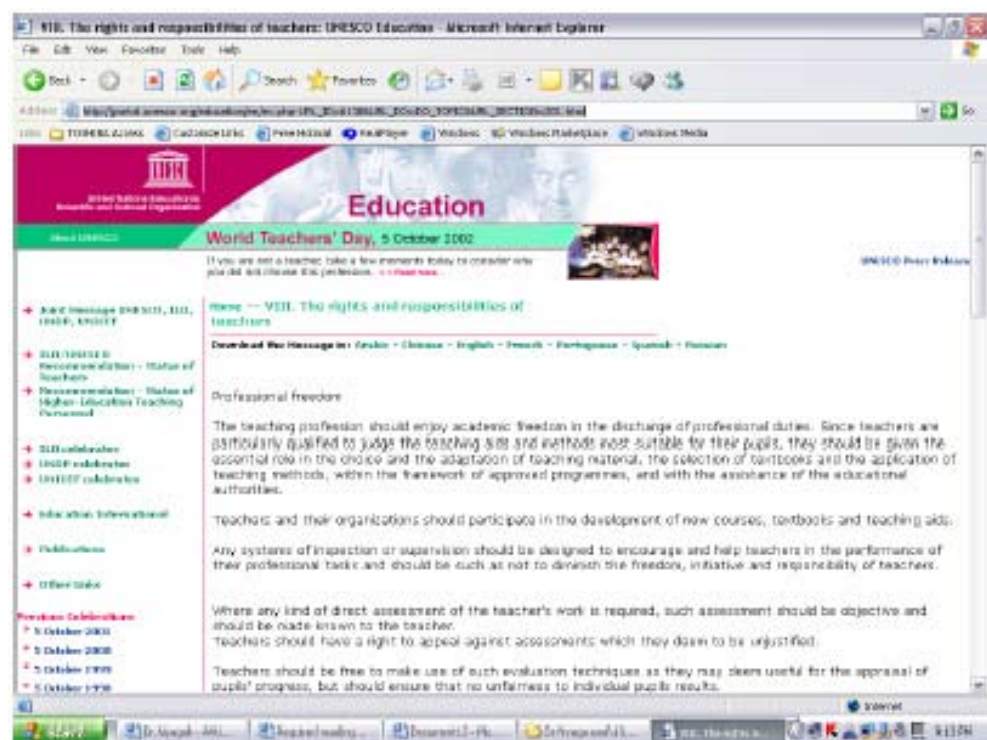


## Reading # 10 Rights and Responsibilities of Teachers

### Complete reference

[http://portal.unesco.org/education/en/ev.phpURL\\_ID=6138&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/education/en/ev.phpURL_ID=6138&URL_DO=DO_TOPIC&URL_SECTION=201.html)

### Screen Capture



### Description

The article emphasizes the need for teachers to enjoy academic freedom to function effectively. Teachers and their organizations are expected to participate in curriculum development; including courses, and teaching and learning materials.

Some of their rights include: “appealing against assessment that they deem to be unjustified; participation in public and social life; and freedom to exercise all civic rights”, etc. One of their main responsibilities is that they should be aware that the status of their profession depends a lot on the teachers themselves; hence they should uphold their conduct as expected.

### Rationale

Teachers need to be aware of their rights and responsibilities. Since teachers are expected to perform their duties without much supervision, their motivation is crucial. This is enhanced by knowing their rights to empower them to take necessary measures if violated; But at the same time, to be aware that rights must be accompanied by responsibilities. Hence the importance of the article.



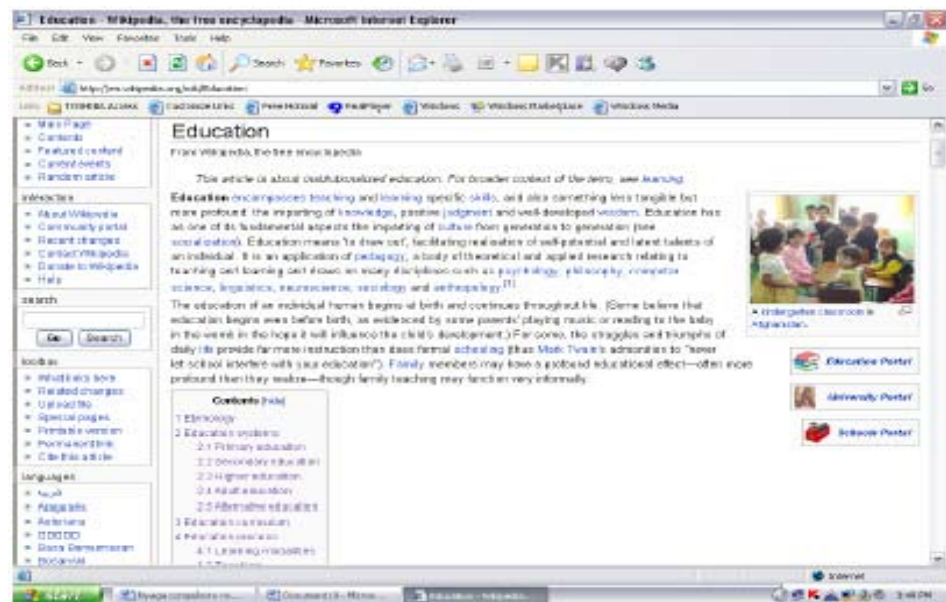


## XII. Useful Links

### Useful link # 1 Education

**Complete reference:** <http://en.wikipedia.org/wiki/Education>

### Screen Capture



### Description

This article discusses several meanings of the term education, e.g. to facilitate the realization of self-potential and latent talents of an individual. It also presents various education systems, starting from primary education, secondary education etc. The teaching and learning processes are briefly explained. Various foundations of curriculum; historical, philosophical, psychological, sociological and influence of education technology are discussed. Finally challenges facing education in developing countries are highlighted, including lack of awareness on the importance of education.

### Rationale

The article is of great importance for understanding issues in curriculum studies. It provides a strong foundation to grasp most of the content in the module. Being aware of the education systems sets the stage for developing appropriate curricula.



## Useful link # 2 Thinking about Curriculum

### Complete reference

<http://webserver3.ascd.org/handbook/demo/curricrenew/pocr/section1.html>

### Screen Capture



### Description

The article starts by presenting various curriculum concepts including the written curriculum, the recommended, the supported and the learned curriculum among others. The hidden and the excluded curriculum are also discussed. Interaction of various Curriculum Types are presented. Guidelines for developing a high-quality curriculum are presented; e.g. structuring the curriculum to allow students and teachers to study in greater depth.

### Rationale

Understanding the various types of curriculum is crucial in the preparation for the teaching career. The student-teacher will also benefit by being able to conceptualize how to develop and implement high quality curricula.

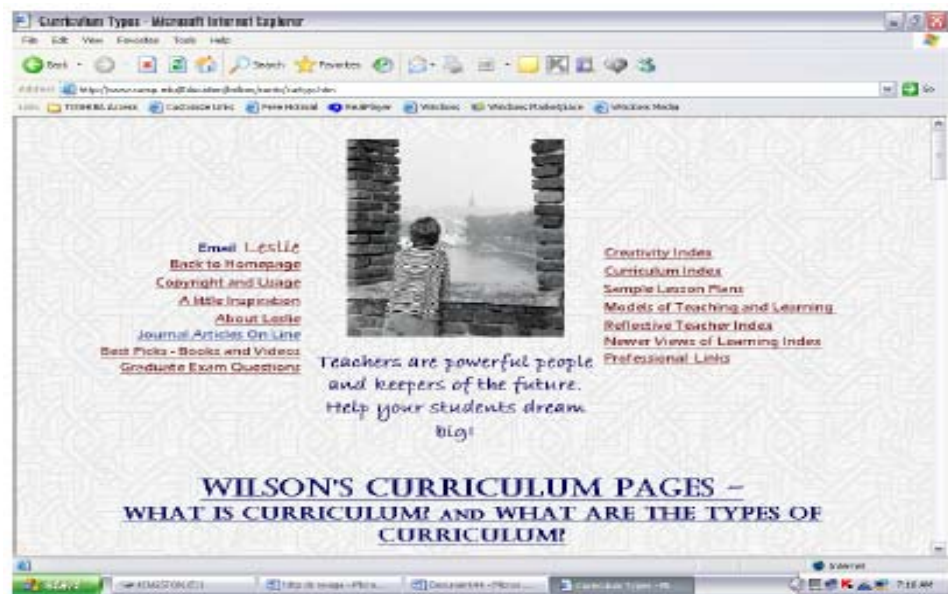


### Useful link # 3      **Wilson's Curriculum**

#### Complete reference

<http://www.uwsp.edu/Education/lwilson/curric/curtyp.htm>

#### Screen Capture



#### Description

This article focuses on the meaning of curriculum. It enumerates and defines 11 types of curriculum including the explicit or written curriculum, the null curriculum, hidden curriculum and curriculum in use.

#### Rationale

Being exposed to the variety of types of curriculum helps the student – teacher gain more insight into the basic concept of curriculum; the core of this unit on curriculum studies.



## Useful link # 4 Core Curriculum

### Complete reference

[http://en.wikipedia.org/wiki/Core\\_curriculum](http://en.wikipedia.org/wiki/Core_curriculum)

### Screen Capture



### Description

Core curriculum is that part of the curriculum or course of study which is deemed central and usually mandatory for all students in any given institution or education system, at all levels. Countries that have cherished core curriculum, particularly former Soviet Union and Russia are singled out. Other specific programmes are those of selected universities in the USA.

### Rationale

Though the article is based on the developed world, core curriculum is a very important concept in education systems globally. There are lessons that can be drawn for curriculum development in Africa.

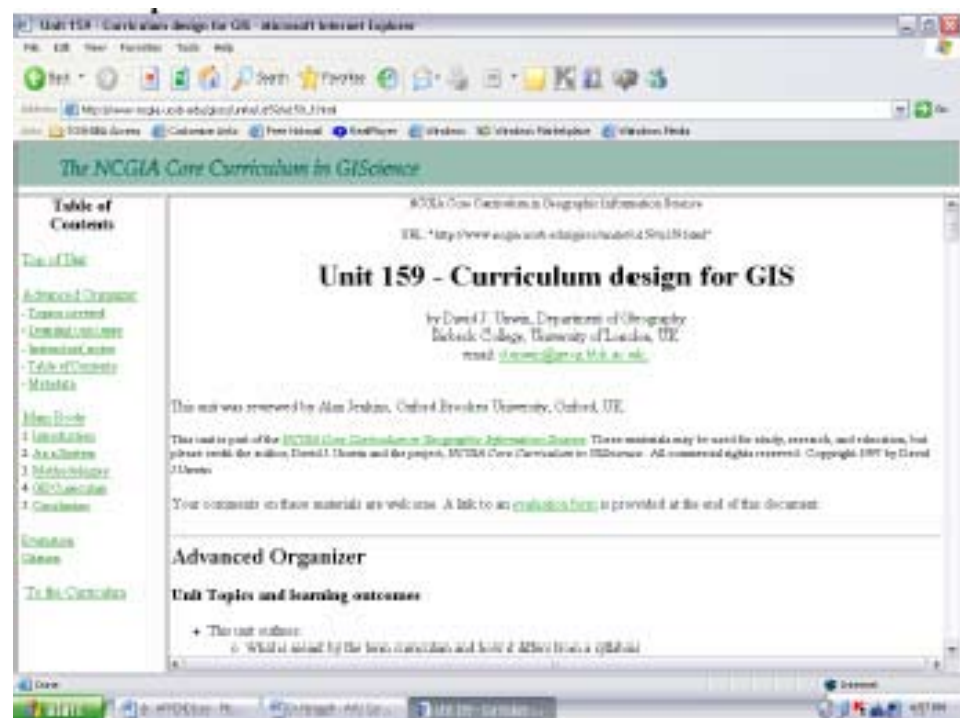


## Useful link # 5      Sociology of Education

### Complete reference

[http://en.wikipedia.org/wiki/Sociology\\_of\\_education](http://en.wikipedia.org/wiki/Sociology_of_education)

### Screen Capture



### Description

The article describes what sociology of education is. The role of education in society and particularly developing individuals to fit well and improve their status is discussed.

### Rationale

Sociology of education is presented in this module as one of the foundations of curriculum. The article therefore provides a deeper understanding of the concept.

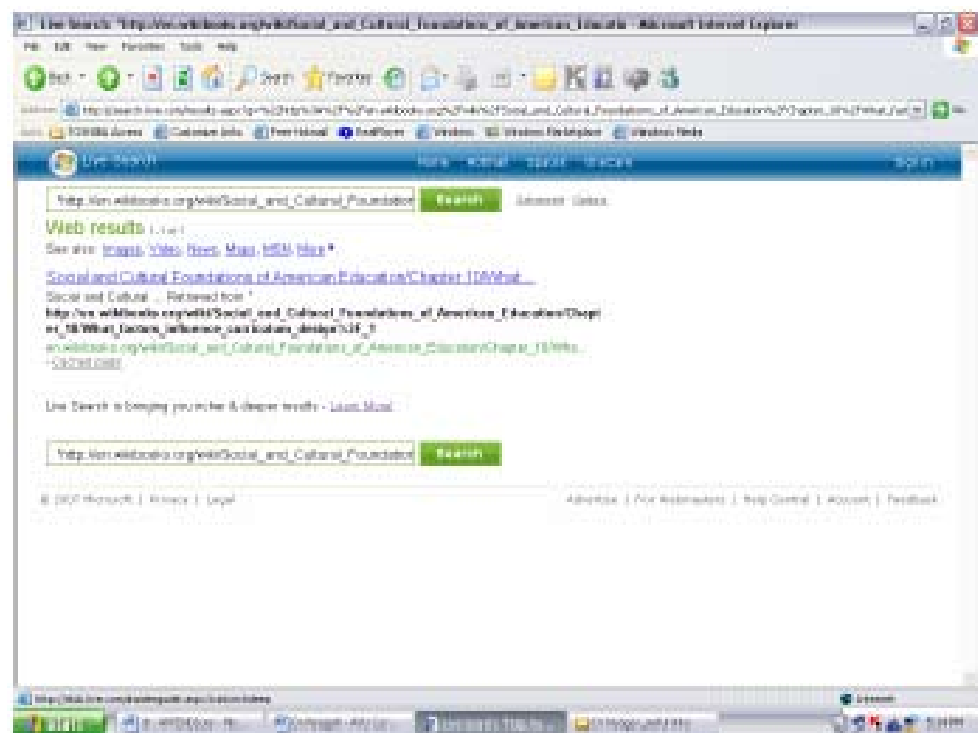


## Useful link # 6 Operant Conditioning

### Complete reference

[http://en.wikipedia.org/wiki/Operant\\_conditioning](http://en.wikipedia.org/wiki/Operant_conditioning)

### Screen Capture



### Description

The first two pages of this article are particularly useful for the student. Concept of Operant Conditioning is explained first; as the use of consequences to modify the occurrence and form of behaviour. Issues of reinforcement and punishment, being the core tools of operant conditioning are addressed. Positive and negative reinforcements are presented, where positive implies 'addition' while negative connotes 'subtraction'.

### Rationale

Operant conditioning is an aspect of psychological foundation for curriculum. The explanation presented will help the student teacher to comprehend the concept even more.



## Useful link # 7 Who is the curriculum designed for and why?

### Complete reference

[http://en.wikibooks.org/wiki/Social\\_and\\_Cultural\\_Foundations\\_of\\_A\\_2C\\_and\\_why\\_%3F\\_1](http://en.wikibooks.org/wiki/Social_and_Cultural_Foundations_of_A_2C_and_why_%3F_1)

### Screen Capture



### Description

This article points out that curriculum should be designed for all stakeholders including the student, the teacher and the parents. Successfully designed and implemented curriculum means teachers have prepared students to become contributing, productive members of the society. Curriculum improvement is also discussed with a focus on improving funding, teacher motivation and awareness of a student's home life.

### Rationale

The article generally contains useful information in curriculum design. The latter part is particularly useful in enlarging the student teacher's awareness on the need to get to know his/her students well right from their socio-economic backgrounds. That would facilitate the teaching – learning process.

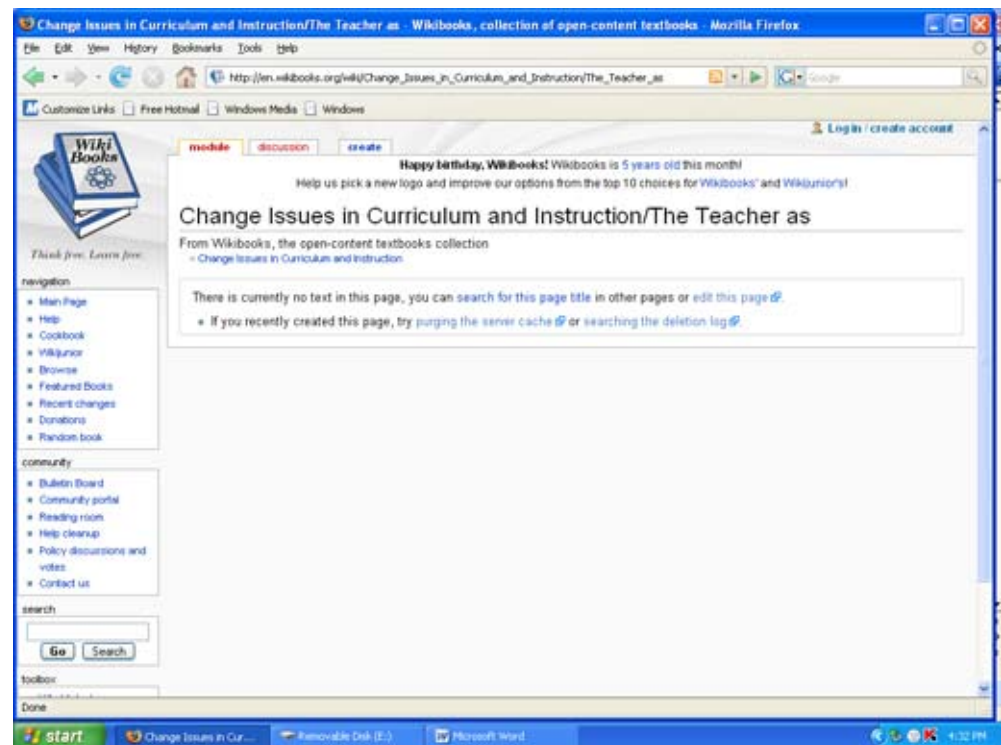


## Useful link # 8      **The Role of Assessment of Performance and Performance Appraisals in Schools and Administrations**

### Complete reference

[http://en.wikibooks.org/wiki/Social\\_and\\_Cultural\\_Foundations\\_of\\_American\\_Educatio\\_Second\\_Edition/15.1.2\\_1](http://en.wikibooks.org/wiki/Social_and_Cultural_Foundations_of_American_Educatio_Second_Edition/15.1.2_1)

### Screen Capture



### Description

The article starts by defining key terms including “Assessment of Performance” and “Performance Appraisal”. For instance, ‘Assessment of performance’ is described as the measurement of educational achievement. Benefits of both processes enumerated for the learners, school and other stakeholders such as parents. This provides a basis for evaluation of curriculum.

### Rationale

Assesment is an important aspect in curriculum implementation and evaluation. Understanding the concept is valuable to the student teacher.



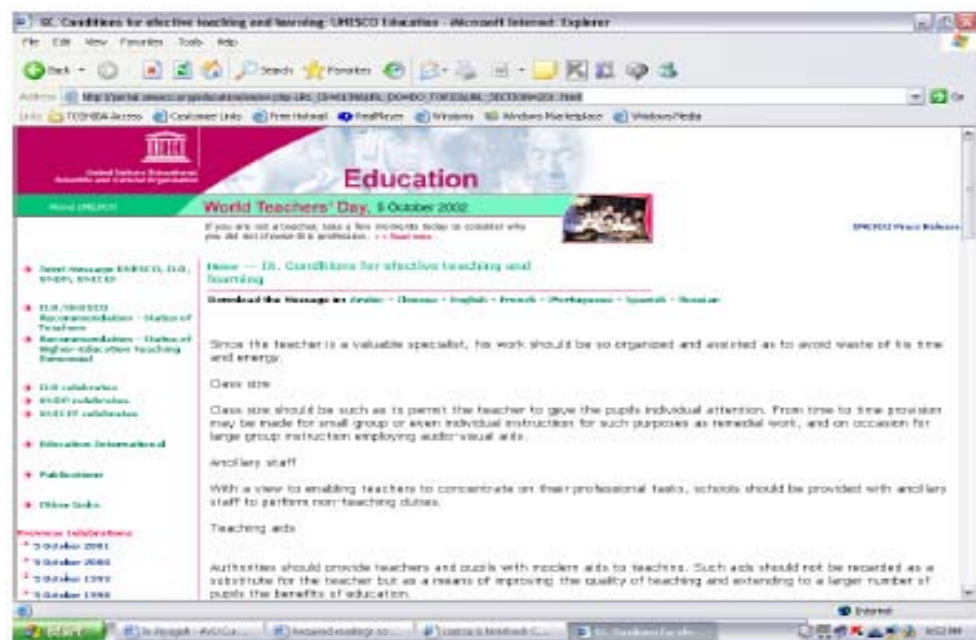


## Useful link # 9      **Conditions for Effective Teaching and Learning**

### Complete reference

[http://portal.unesco.org/education/en/ev.php-URL\\_ID=6139&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/education/en/ev.php-URL_ID=6139&URL_DO=DO_TOPIC&URL_SECTION=201.html)

### Screen Capture



### Description

The article presents conditions that are necessary to ensure curriculum is implemented successfully for students learning. These include; class size, teaching aids and school buildings. Others include those that make the teacher comfortable including; 'hours of work' to ensure teachers are not overloaded; various types of leave e.g. study leave, sick leave etc. The article also highlights importance of providing adequate teachers in rural

and remote areas.

### Rationale

The importance of the article lies in the need to have curriculum implemented in a smooth way. The student teacher needs to be aware of what could impede success of a curriculum so that intervention measures can be taken. He/she can take initiative to have issues rectified where necessary.

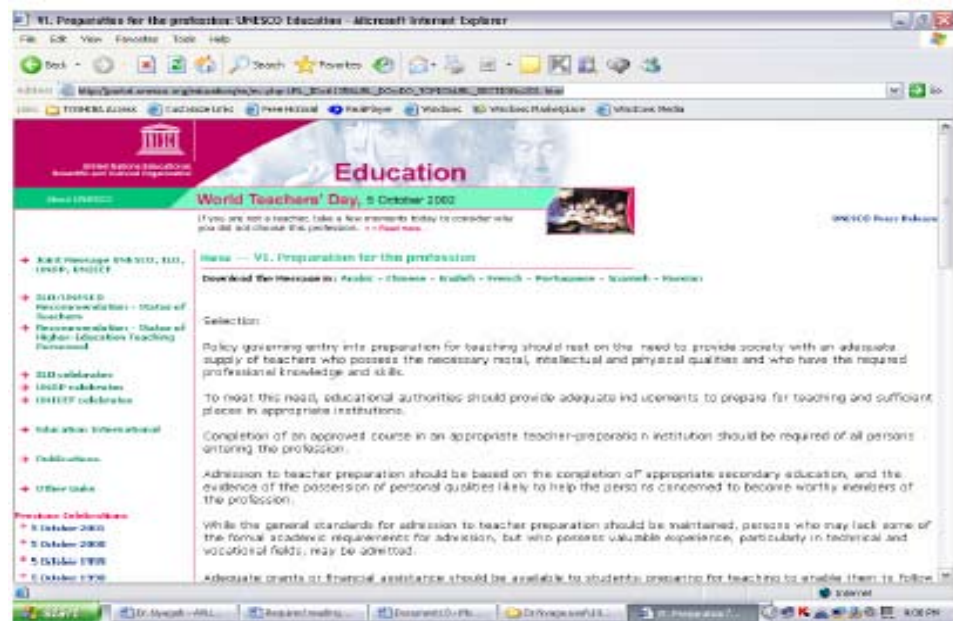


## Useful link # 10 Preparation for the Profession

### Complete reference

[http://portal.unesco.org/education/en/ev.php-URL\\_ID=6135&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/education/en/ev.php-URL_ID=6135&URL_DO=DO_TOPIC&URL_SECTION=201.html)

### Screen Capture



### Description

This article starts by highlighting the ultimate goal of preparing teachers, i.e. to produce moral, intellectual teachers with the required professional knowledge and skills. Entry requirements to be selected into the profession are discussed. Teacher preparation programmes are also discussed which will bring out the desired characteristics of teachers. Role of research in Teacher Education is also emphasized.

### Rationale

Teacher Education is an important element in implementation of curriculum. The issues raised in the article are handled in the relevant section in the module. Reading the article provides a different approach to the issues and thus enriches the student teachers knowledge.



## XIII. Learning Activities

### ACTIVITY I

#### Title of Learning Activity

#### DEFINITIONS AND MEANING OF KEY CONCEPTS IN CURRICULUM

#### Summary of the learning activity:

At the end of the Unit you should be able to:

- a) Define the terms education and curriculum
- b) Identify functions of education
- c) Explain the scope of curriculum studies
- d) Describe what a curriculum theory is.
- e) Differentiate between aims, goals and objectives
- f) Differentiate various dimensions of school curriculum

#### Summary

Generally, curriculum represents the expression of educational ideas in practice. The concept of education has a variety of meanings attached to it by different people; for example school attendance. However, one commonly accepted definition of education is the process of acquiring and developing desired knowledge, skills and attitudes.

Dimensions of the school curriculum include: formal (expressed), non formal and informal (implied). Education has four main functions: productive, intellectual, personal and social dimensions. The term curriculum on the other hand also has a variety of definitions; including “A course of study”. This unit also discusses aims, goals and objectives; a crucial element of curriculum, as well as meaning of curriculum theory.



### **Key Words**

Education - Process of acquiring desirable knowledge, skills and attitudes.

Curriculum - A course of study.

Curriculum Theory - A set of related statements that give meaning to school curriculum.

Aim - A statement that guides and directs educational planning

Goal - A statement that provides ultimate destination

Objective - A statement of performance to be demonstrated, stated in measurable and observable terms

### **List of REQUIRED readings**

<http://en.wikipedia.org/wiki/Curriculum> - Appendix I

[http://www.mordialloccluster.vic.edu.au/documents/datt\\_tools/ago.doc](http://www.mordialloccluster.vic.edu.au/documents/datt_tools/ago.doc)  
- Appendix II

<http://www.businessballs.com/bloomstaxonomyoflearningdomains.htm>  
- Appendix III

### **List of relevant useful links**

<http://en.wikipedia.org/wiki/Education>

<http://webserver3.ascd.org/handbook/demo/curricrenew/pocr/sectioni.html>

<http://www.uwsp.edu/Education/lwilson/curric/curtyp.htm>

### **List of relevant resources**

A computer with internet facility to access links and copyright free resources  
Multimedia resources like Video, CD Rom.

### **Detailed description of the activity**

1. Read through the information provided in the text in this unit.
2. Carry out the specific activities presented in the various sections of this unit.

We shall begin by discussing the term education.



## Meaning of Education

### What is Education?

As a student teacher, you will need to reflect on the meaning and functions of education, to understand, and prepare yourself to fully comprehend the concept of curriculum, its development and implementation, and thus carry out your future role as an educator effectively. Education has been described differently by different people. One way of viewing education is that it is a process of acquiring the desirable knowledge, skills and attitudes to fit well in society and become a useful member of that society. The term education means “to draw out”, i.e. facilitating realization of self-potential and latent talents of an individual. The teacher thus uses “curriculum” to bring out the best out of the learners.

### What then are the function of education?

#### Function of Education

Education has a variety of functions including the following:

- Intellectual function. This is to enable men awaken in and have a taste of knowledge. It is also to develop intellectual powers of learners.
- Productive function i.e. provide individuals with knowledge, skills and attitudes that could be used for economic activities in a society. Vocational training contributes to this function.
- Social function. in this context, education is considered as a process of preserving and transmission of cultural heritage. Beside education helps learners acquire skills for interpersonal
- Education is also a means of individual development. It therefore serves a personal function.

## Meaning of Curriculum

The term *curriculum* originated from the Greek word “*curere*” meaning to “run a course”. It therefore represents a course of subjects covered by learners in their race towards a certain educational goal or target. Curriculum definitions have developed along a continuum from narrow to broad ones. There is also a myriad of curriculum definitions by different scholars.

**Narrow definitions** see curriculum as a plan, programme, course of study or a package that can bring about learning. Following are some definitions from this narrow perspective:

- A course of study
- A plan for teaching and instruction; it can be viewed as a blueprint for instruction (Pratt, 1994)



**Broad definitions** on the other hand see curriculum as a *process*. The process includes the thinking behind coming up with a 'package' and the continuous effort of making it serve the needs of society. It includes values, attitudes, and experiences of students inside and outside the school.

**Elements/components of a curriculum:** A curriculum generally is expected to consist of the following elements:

- Aims, goals and objectives.
- Subject content / learning experiences
- Methods / strategies of delivery / learning activities
- Organization of learning Experiences

### Activity

1. Read carefully information in Appendix I: Curriculum.
2. Identify three of the curriculum definitions that you could adopt in curriculum planning in your country. Justify your choice of definition. Use 100 words in each case.

**Definition I**

**Definition II**

### Scope of Curriculum Studies

Curriculum studies incorporate a variety of issues and processes including:

- Curriculum theory
- Curriculum planning
- Curriculum design
- Curriculum development
- Curriculum implementation
- Curriculum evaluation

Each of these terms is hereby explained briefly:



## **Curriculum Theory**

### **What is curriculum theory?**

Curriculum theory refers to a set of related statements that give meaning to school curriculum; by pointing out the relationships among its elements and by directing its development, its use and its evaluation. It gives justification for practices in curriculum.

According to Urevbu (1990), a curriculum theory should provide a practical guidance as to:

- “What to teach”
- “Who is taught”.
- Who should control its selection and distribution, and
- Who gets taught what?

In other words, it is a way of seeing ‘things’ or guiding principles for curriculum.

### **Functions of Curriculum Theory**

What then are functions of a theory? Most philosophers of science argue that theory has 3 legitimate purposes:

- To describe
- To Explain
- To predict

Thus, a curriculum theory provides educators with a critical perspective about the society and its schools. Hence, they describe and explain from a critical perspective.

Curriculum theory is therefore important for planning curriculum. It helps in guiding the planning process and ultimately curriculum development. The theory used is reflected in the produce i.e. the final curriculum.

### **Curriculum Planning**

This can be viewed as the process of gathering, selecting, balancing and synthesizing relevant information from many sources in order to design those experiences that will assist the learner attain the goals of education (Glen, Hass, 1980).

Curriculum planning is therefore the thinking or conception stage of the curriculum development process. Thus, it deals with seeking key answers to crucial questions such as:



- What should be taught?
- How should it be taught?
- To what segment of the population and
- What should be the relationship between the various components of the curriculum?

**Note that the issues raised in planning are related to those highlighted in curriculum theory.**

### **Curriculum Design**

This refers to the structure or pattern of organization of the curriculum (Doll, 1992).

Further details are provided in Unit III

### **Curriculum Development**

Curriculum development is the term under which all processes and activities of the school curriculum are subscribed. It is thus a continuing process of evolution and planning of curriculum.

A deeper analysis of the concept is found in Unit III.

**Curriculum implementation** is putting into effect what has been planned. It is thus the process of ensuring that the new curriculum and curriculum materials are made available to all the schools and institutions targeted by the curriculum development project.

Refer to Unit III for more details on the implementation process.

### **Curriculum Evaluation**

This is the process of checking the extent to which the curriculum objectives have been achieved.

For more information, read Unit IV.

### **Curriculum as a field of study and as a programme of instruction**

Curriculum can be viewed either as a field of study or as a programme of instruction. As a field of study, curriculum is designed to improve and advance knowledge about curricula, their development and use. As a discipline for study, the area has enough knowledge content which can be passed on through instruction and which grows through research.

On the other hand, curriculum as a programme of instruction incorporates a programme of school work, dealing with all experiences of the learner, ie. all that which is planned and provided for the learners for their education. This includes the syllabuses and the courses of study, among others.





## **Educational, Aims, Goals and Objectives**

Aims, goals and objectives are crucial in the curriculum development process. We shall therefore, at this early stage in the module, explain the meaning of these terms. We shall also discuss how to obtain curriculum objectives and the best way of stating them. Let us begin with Aims.

### **Educational aims**

Aims serve a visionary function in curriculum; a rallying point for all curriculum activities. Aims also have a global quality and a broad framework. They help in guiding and directing educational planning. They also establish the philosophy on which curriculum is based and express the values expected. Thus, aims constitute the first stage of curriculum planning.

There are four dimensions of aims:

Intellectual – Focus on development of intellect.

Social – Deal with interpersonal relationships.

Personal – Dealing with self development.

Productive – Address economic aspects of the society, both micro and macro economics.

### **Goals**

These constitute a more specific application of aims, so goals provide destination. Goals have an end in mind so that particular purposes can be achieved.

Goals indicate what is expected to be accomplished from particular effort. For instance from a programme, course, subject, application of resources, amount of time allocated to a particular curriculum task etc.

### **Objectives**

**Definition:** Statement of performance to be demonstrated; derived from instructional goal and stated in measurable and observable terms.

Objectives provide more specific guidance in making decisions on various aspects of the curriculum. Objectives are thus written using measurable and observable terms.

(For further reading on Aims, Goals and Objectives, see Appendix II)



### **Why do we need objectives?**

- They guide decisions about selection of content and learning experiences.
- They clarify what skills and abilities are to be developed at what levels.
- They enable the teacher to communicate with students what they need to achieve; and make accountability and evaluation easier.

### **Writing behavioral objectives**

A behavioural objective should indicate:

- Behaviour expected (action verbs!)
- Conditions under which student behaviour is to be demonstrated
- Degree of mastery.

In writing objectives, we should consider the various Domains of learning, proposed by Benjamin Bloom et al. The Domains of learning are:

- Cognitive Domain – Focussed on Intellectual Dimension
- Affective Domain – Includes emotions, attitudes and feelings
- Psycho-motor Domain – Physical aspects of learning.

Benjamin Bloom went further and offered a detailed classification of objectives in the cognitive domain. The Taxonomic levels are: knowledge, comprehension, application, analysis, synthesis and evaluation.

As we plan curricula, we need to incorporate the various levels of learning, from the lowest level of knowledge, to the higher levels of evaluation.

For further details read appendices II and III.

### **Detailed description of the activity**

1. Read Appendix II: “Aims, Goals and Objectives”
2. Differentiate between aims and objectives. Using your own words (50 words)
3. Read the material in Appendix III “Bloom’s taxonomy of Educational Objectives.  
This will help you to further understand the area of educational objectives, especially the construction of objectives .
4. Write Two educational aims from the subject (s) you are training to teach.
5. Write Two objectives for each of the aims you have written above.



## Sources of Educational Objectives

Generally, there are three main sources of objectives: the learners, society and subject matter.

Lets examine each in turn.

### Learners as sources of Objectives

In formulating goals and objectives, curriculum planners are concerned principally with the needs of learners as members of society. Also important are their interests, and aspirations as well as their potential.

Learners needs can be categorised into the following:

- Physical Needs
- Social Needs
- Psychological Needs

Let us describe each of those needs briefly.

### Physical Needs

Curriculum developers should ask themselves what the physical needs of students are as members of the human community. Examples of universal human needs include food, clothing, shelter and good health, among others.

Generally, all students have the same physical needs globally. To meet students physical needs therefore means that educational objectives should be formulated specifically to cater for areas of knowledge, skills and attitudes that will help meet those needs.

### Sociological Needs

All students possess sociological needs which schools must strive to satisfy. These include affection from home, school and peers; acceptance, belonging, success, security, status and respect. Social needs of students must therefore form one of the basis for formulating educational objectives.

### Psychological Needs

The psychological aspects of learners' e.g. emotional needs, should be taken into consideration in deriving educational objectives.

Of special importance are needs of those who are in special circumstances, those with disabilities such as mental, specially gifted children, emotionally disturbed, and retarded children. Curriculum must address these situations for all children to benefit from education.

*How then can these needs be identified?*

Let us find out.



### How to identify needs

The process of identifying learners' needs is no mean task. This is due to the diversity of needs for specific individuals, groups of students from various socio-economic backgrounds and various age groups.

It may not be possible to study all aspects of students needs in many of our developing countries which are often quite diverse such as Kenya. However, some suggestions are made to facilitate the investigation of the needs. The students needs should be broken into levels. For instance, the needs of primary schools children, secondary and post-secondary youths. This categorization can be followed by splitting the learners into various age groups.

Information about the needs of learners can be obtained by using the following methods among others.

1. Social investigation approach can be used – this may involve teachers observations;
2. Student interviews can be very helpful in providing the required data on students needs and interests, and their expectations of what to expect from school;
3. Parent interviews can also be used to provide further information about their children;
4. Questionnaires could be used to provide useful information on some aspects which interviews could not provide.
5. Tests and school records will throw light on skills and knowledge of various students in schools.

You have now completed examining learners as a source of educational objectives. Let us now examine society as a source.

Why do you think society should be considered as a source of objectives?

Society is a crucial source of educational objective for a variety of reasons:

- First the school is supposed to prepare the youth for life in society. Hence the school curriculum should reflect what goes on in society. E.g. cultural aspects of society should be incorporated.
- Secondly, society provides support for education, e.g. in funding resources etc and should therefore be consulted in curriculum planning.
- Thirdly, education should address the myriad of problems and cultural issues in society such as unemployment, health issues such as HIV/Aids, and other vices such as corruption. Think of at least three (3) other issues from society that need consideration in objective setting; and write them down and explain briefly in about 50 words.



### Subject specialists/subject matter

Who are subject specialists? These are experienced teachers and educators with adequate experience to be involved with curriculum making. Subject specialist are crucial in the process of objectives setting. This is because they are the “custodians” of knowledge. Text books are written by subject specialists among other reasons. Their contribution is therefore vital for curriculum objectives.

**Now carry out the following activities.**

### Activity

1. To what extent do you think all the sources of information discussed above for curriculum objectives are used in your country? You can answer that by discussing with an experienced teacher in a school near your neighbourhood. Respond in about 150 words.
2. Identify and discuss three challenges/difficulties e.g. resources, that affect the emphasis on considering learners needs in curriculum in your country?

You can use the following format.

	Reasons	Justification
a)	_____	
b)	_____	
c)	_____	

3. Examine five goals of education in your country and identify the major student needs e.g. health, social relationship, vocational etc. that are addressed in each goal. Discuss each goal in about 50 words.

### Dimensions of Curriculum

There are many dimensions of curriculum; including formal (or expressed), informal (or hidden) and non-formal: among others. We shall briefly highlight what each of these curriculum dimensions represents.

**Formal dimension** is generally considered as the written document that specifies what is to be taught and how it will be taught and evaluated. The formal curriculum therefore includes the aims, goals and objectives, learning content, delivery strategies and methods of evaluation. It is the course of study or syllabus. This is the curriculum dimension that is “planned for” or the predetermined part of the curriculum.



**Non-formal curriculum** – This refers to learning planned outside the formal learning system. For example, learning taking place through students with similar interests coming together and exchanging viewpoints, e.g. in clubs, youth organizations or workshops; or even in various games.

**Hidden Curriculum** consists of indirect messages received by learners from the physical, social and intellectual environments of the school. It includes norms and values of the surrounding society. These are stronger and more durable than the formal curriculum and may be in conflict with it. This is something that is not explicitly taught but it is part of what molds the school environment, and consequently the learner.

**Informal Curriculum**, Sometimes referred to as hidden curriculum includes those activities that happen that are not designed, planned or formally accepted by the school. Informal learning occurs through the experience of day-to-day situations. It is learning from life, during say play, exploring, during a meal at table etc.

**Null curriculum** consists of what is not taught in the school set-up. This may give students the impression that these elements are not important in their educational experiences or in the society. The education system may use a combination of formal, informal and non-formal curricula and learning approaches. In some schools students can get points that count in the formal – learning systems through working in informal – learning set-ups or circuits.

### Summary

In this unit, we have examined the meaning of various terms used in curriculum studies. For example, education was described as the process of acquiring and developing desired knowledge, skills and attitudes.

We also noted that the term curriculum, as with many other terms in the field, has a variety of definitions by different scholars. One common definition mentioned was

“Curriculum as a course of study”. The scope of the field of curriculum was presented as including curriculum theory, planning, design, development, implementation and evaluation.

Aims, goals and objectives were also discussed with aims considered as serving a visionary function for education while objectives were the most specific. Sources of objectives include learners themselves, society and subject specialists.

How to write good objectives in measurable and observable terms was emphasized.

Finally, dimensions of curriculum were presented including formal, non formal and informal.



## Formative Evaluation

### Questions

1. Explain four functions of education. Which of the functions is stressed most in the education system in your country? (150 words)
2. What is the purpose of a curriculum theory? (about 75 words)
3. Discuss the various sources of objectives (200 words)

### Possible answers

Q1. Start by providing the meaning of the term education. Four functions include:

- Intellectual function
- Productive function
- Social function
- Personal function

*Explain each of the functions and include any others from your own experience using appropriate examples.*

It is likely that the intellectual function is given prominence in most African countries. This is due to excessive emphasis on the cognitive domain

Q2. A curriculum theory is a set of related statements that give meaning to the school curriculum. Purposes of theories include:

- Provides practical guidance to the curriculum development process.
- Assists in answering crucial questions as one embarks on curriculum planning e.g.
  - What to teach?
  - Who is to be taught? etc

Theories help in describing, explaining and predicting various issues that need consideration in the process of curriculum making.

Q3. Three main sources of objectives are:

- The learner needs and interests.
- The society, its culture, problems and issues.
- Subject specialists.

*(Expound on each of those points)*



## **Learning Activity II**

### **Title of Learning Activity**

#### **FOUNDATIONS OF CURRICULUM**

Welcome to this unit on foundations of curriculum. In this unit we will explore the various foundations of curriculum; Historical, Philosophical, Psychological and Sociological foundations and how they affect decision making processes in curriculum making.

### **Summary of learning activity**

By the end of this unit you should be able to:

1. Describe the various foundations of curriculum.
2. Explain the influence of historical foundation on curriculum.
3. Differentiate between the various philosophies and their influence of curriculum development.
4. Explain the role of sociological foundations in curriculum design
5. Explain the influence of political factors on curriculum development.
6. Explain the influence of psychology on the learning process and consequently the curriculum.

### **Summary**

Foundations of curriculum are those factors that influence curriculum decisions. There are traditionally four of them; historical, philosophical, sociological and psychological foundations. Other determinants include political issues, and technological factors.

The curriculum developer has to keep in mind these factors to produce a curriculum that is relevant, implementable and useful to individual learners and society.





### **Key words**

- Curriculum foundation: The basis upon which curriculum is developed.
- Historical foundation: Factors and issues from the past that influence curriculum at present.
- Philosophy: search for truth; pursuit of wisdom or knowledge.
- Sociological foundation: issues from society including groups and institutions in the culture and their contribution to education.
- Psychological foundation: includes insights gained from the field of psychology that have a bearing on the learning process and consequently the curriculum.

### **List of relevant readings**

### **List of relevant resources**

Computer  
Multimedia resources

### **List of relevant useful links**

[http://en.wikipedia.org/wiki/Sociology of education](http://en.wikipedia.org/wiki/Sociology_of_education)  
[http://en.wikipedia.org/wiki/Operant conditioning](http://en.wikipedia.org/wiki/Operant_conditioning)

### **Detailed description of the activity**

You are expected to read the information presented in this unit on each of the four foundations: historical, philosophical, sociological and psychological. At the end of each section, there are specific tasks and questions which you need to answer as instructed. I suggest that you first scheme through the entire unit, paying special attention to the activities, and then go back and read the text in detail.

### **What is a Curriculum Foundation**

Many scholars define curriculum foundation as the “Values, traditions, factors and forces which influence the kind, quantity and quality of the experience the school offers its learners” (Shiundu & Omulando, 1992: 59).

They therefore constitute the basis upon which curriculum is developed.



Generally, scholars propose four major categories of curriculum foundations. These are:

- Historical foundations
- Philosophical foundations
- Psychological foundations and
- Sociological foundations

Let us now examine each of them in turn.

### **Historical Foundations of Curriculum**

Historical foundations of curriculum refer to factors and issues from the past that have an influence on the curriculum at present. For instance, the nature of the present curriculum in any school system of education is influenced by the nature of the curriculum in the past. Both the content and pedagogical practices are outgrowths of specific historical conditions. Additionally, the various historical movements in education influence the current curriculum to some degree. Some of the major forms of education in the past that are recognized globally in education include:

- Traditional Education
- **Ancient Education which includes:** Greek Education, Roman education and Christian Education
- **Early Modern Era, which includes:** Renaissance, Reformation and Enlightenment (Age of Reason)
- **Modern Era including:** Progressivism

Within the African context, education systems and practices during the colonial era (for most of Africa) would have an influence on current curriculum.

We shall now briefly highlight aspects of some of these types of education.

#### **Traditional Education**

In all societies, traditional education was aimed at learning the ways of the parents. It was, and still is in some communities, a very conservative form of education and emphasizes on maintaining the status quo in society. The culture, traditions and practices of the people are passed on from one generation to the next in methods that do not change much over the years.

The Republic of Kenya, for example, has communities that uphold traditional education dearly.



### **Ancient Era**

The ancient era is often considered as being that of the Greek, the Roman, the Hebrew and the Christian periods. The **Greek** education, which has influenced the current world systems of education, is credited to the work of Socrates and other Greek scholars such as Aristotle. The main aim of Greek education was Good citizenship for the populace, who would support and defend the state and its laws; development of a rational mind; and creativity.

The **Roman** Education in turn emphasized on equipping the citizenry with knowledge and skills to defend the state; respect tradition; and highlighted the value of practical skills among other aims of education.

On the other hand, the Christian Education was focused on moral education and character building.

### **Progressivism**

With regard to progressivism, the emphasis was on a child – centred curriculum, which necessitates a flexible broad curriculum. There was also an emphasis on practical skills.

In general, it is possible to identify elements of past education in the present day curricula in many education systems within Africa and the rest of the world, depending on the past history. For example, the colonial periods (where applicable) had a major influence on curriculum during and post the colonial era.

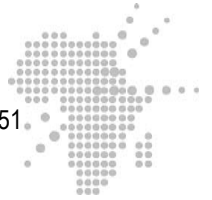
### **Now carry out the following activity for further understanding**

#### **Activity**

1. Read the above information on historical foundations.
2. Select one of the 'Types' of education offered in the past (say for example Roman education) and discuss how it has influenced the present curriculum in your country. To show that you understand the issues, write a 200-word essay and support your arguments with examples from your system. You could follow the following structure :

Essay Topic:

- a) Introduction
- b) Body of the essay highlighting major points
- c) Conclusion



2. We will now try to have a look at the evolution of education in your own country. In order to do that, you are required to gather at least two references presenting the evolution in your country.

a) Write a brief summary and the full reference of these two readings that you find. Use the following format :

Reference: Show the following information: Name of the author, year of publication, Title of the publication, city of publication and publishers. Example: Doll R. C. (1992) Curriculum improvement: Decision making and process. Boston: Allyn and Bacon.

Write a brief summary per reading.

Reading #. 1

Reference

Brief summary (50 words).

Reading #2

Reference

Brief summary (50 words)



3. Identify 3 major factors that have influenced education in your country, and justify your answer. You could use the following structure.

Factor e.g. population explosion, colonization (where applicable) etc.	Justification (i.e. how the issue has influenced curriculum)- 100 words
1.	
2.	
3.	

### Philosophical Foundations

Welcome to the philosophical foundations of curriculum. In this section we will explore the philosophical foundations which include, Idealism, Realism, Pragmatism, Existentialism, and Educational philosophies which are Perennialism, Essentialism, Progressivism and Reconstructionism.

Let us start by addressing the question; “**What is Philosophy?**”

Many sources consider Philosophy to be the “Search for truth”; Pursuit of wisdom or knowledge, especially ultimate reality (Oxford Dictionary). Locke defines Philosophy as a “process of liberation from ignorance and prejudice”.

According to Doll (1992: 28) Philosophy has the multifaceted effect of helping us to:

- Indicate in general what we mean
- Make what we mean more specific and definite
- Develop what we mean into a useful construct.

Thus, Philosophy is a crucial determinant of curriculum trends and the curriculum development process by helping clarify our thought process. And because philosophy is a process of the mind, there are a variety of philosophical thoughts that we are going to consider.

To start with there are two broad categories of Philosophy: the traditional and modern philosophies. In each of those categories, there are major Philosophies such as idealism, realism, pragmatism and existentialism, as well as educational philosophies arising from those major philosophies. These include perennialism and essentialism in the traditional category; while progressivism and reconstructionism fall under the modern philosophies.

*We will now discuss each of these Philosophies in turn.*



### **Idealism**

This is considered to be one of the oldest philosophical systems, whose main proponent was the Greek philosopher Plato. Idealism advocates that ideas constitute what is real and permanent, i.e. ideas are the only true reality. Idealism also emphasizes the spiritual component of man, i.e. man is a spiritual being.

According to this philosophy, education is the process of development of a person, his/her conscious and spiritual self. The ultimate responsibility for learning rests with learners. The school exists to develop his character, increase his knowledge and cultivate his aesthetic taste. Teacher is expected to be a model, friend and guide to the learners.

### **Realism**

The Realists school of thought can be traced back to Aristotle, another Greek, as the main philosopher. According to this school, matter or objects that we see exist by themselves; i.e. they exist absolutely with or without man. In other words, matter is not a construct of human mind.

The following principles are therefore upheld;

- The principle of independence of matter
- The principle of orderliness of the world behind its organization. This means that law and order prevail in the universe.
- The principle of the world as real as discovered by the scientist.

Thus, it is possible to have objective knowledge of the world. Our senses are also a source of knowledge. The philosophy also advocates that values exist objectively; they are absolute and eternal.

**What then are the Educational implication of realism? Following are a few.**

- The ultimate educational aim is achievement of knowledge of nature and inner workings of the universe.
- Education is essentially transmission of inherited culture from one generation to another.
- Disciplines of curriculum should contain certain elements of culture.
- Students should learn disciplines to develop intellectual skills to discover important principles and theoretical insights.

There should therefore be a core curriculum compulsory for every learner.

### **Pragmatism**

The main proponent of pragmatism was John Dewey (1859 -1952). The proponents of pragmatism were reacting against what they considered to be failures or



shortcomings of the traditional school system, supported by idealism and realism. Some of the criticisms were: (1) traditional curriculum content included a lot of meaningless and needless content (2) Traditional curriculum did not give a Utility Education (3) The curriculum was rigid and did not cater for individual needs of particular learners.

Pragmatists therefore advocated for reality being considered as instrumental, i.e. used as instrument to solve problems. The Philosophy is therefore built on practical usefulness, i.e. “cash value of ideas. Hence, truth is what works, what turns out all night. Truth also should be the idea that has been tested, verified and found effective in solving problems.

***What are the Educational implications of Pragmatism? They include:***

### **Learning from Experience**

If experience is source of knowledge, it is also a source of education. **We learn by doing.** However, not every experience is educative; Experience must be productive; i.e. produce growth.

**Aim of education is to develop learners’ ability to deal with future problems;**

That is, to develop his intelligence to solve problems. According to Dewey, the process involves, (1) Identifying the problem (2) Formation of hypothesis(es) (3) Gathering or collecting data and tools to solve (4) Testing each hypothesis (5) Storage of the unity of knowledge to be used in some of similar situation.

**Curriculum:** Pragmatists propose a curriculum based on problems that arise out of daily living. School is therefore an extension of home and community.

### **Methods of study**

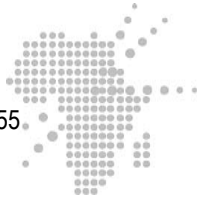
These should include: problem solving; activity; projects and group involvement. Teachers should be a resource and guide; thus motivator. Teaching must be child-centred

For pragmatists, all subjects are vital. However sciences were favoured because the child is able to explore new knowledge.

Let us now examine Existentialism as a philosophy and its influence on curriculum.

### **Existentialism**

According to Akinpelu (1981) Existentialism is defined as “the philosophy of existence”. Sartre (1957) also state that “Man is nothing else but what he makes of himself”. Man is therefore free to choose the type of life he would like to



live; he is in control of his destiny. He is thus free to make his choices and be responsible for them.

Reality therefore is **subjective**. Values emphasized are those that the individual chooses freely according to his/her perception.

### **Implications of Existentialism on Education and Curriculum**

The main implication is an emphasis on knowledge and abilities for personal choice. Hence, the need to acquire knowledge and principles of the human condition; and Acts of choice making.

The Curriculum should have a broad range of subject matter from which learners can choose; i.e. electives. Inclusion of subjects that involve human emotions; aesthetics; and also philosophical subjects. Most important is that the philosophy tries to free learners what they are to learn and believe. Thus, there should be no standard guides for teachers to follow, given that learners are unique.

**The following activity will help you internalize the information on philosophies.**

#### **Activity**

1. Study the above text on major philosophies, and any other source you may access.
2. Explain in your own words what you understand by “Pragmatism” (50 words)
3. Identify three aspects of secondary school curriculum in your country which you would consider to represent ‘Pragmatism’ as a way of approach to curriculum making (write an essay of 200 words. Specify each aspect and explain.

**Aspect**

**Explanation (50 words each)**

- a) \_\_\_\_\_
- b) \_\_\_\_\_
- c) \_\_\_\_\_

### **Educational Philosophies**

Based on the major philosophies so far discussed, certain educational philosophies were developed by various scholars. Let us examine some of them.

We begin by pointing out that there are two broad categories of educational philosophies, that is, the traditional and the modern philosophies.

Traditional educational philosophies include perennialism and essentialism; while modern educational philosophies include progressivism and reconstructionism.





### **Perennialism**

Perennialism draws from both idealism and realism. The Perennialists believe that the “cement of education is the common nature of man” (Doll, 1992:29). With that focus, education should be the same for everyone.

Education must therefore pursue perennial truths. These truths are absolute and universal. The philosophy presupposes that there are permanent studies and knowledge that is available, particularly from the great books, which should be taught to all students.

The stress is on significance of reason and intellectual development. **Curriculum** is expected to contain “important” subjects taught in their customary separate form e.g. History as History; Geography as geography; Civics as Civics rather than combining them and naming them “Social Studies” for example.

Other subjects emphasized on include Literature, Philosophy and Theology, because of their ability to “sharpen the mind”.

### **Essentialism**

As with perennialism, essentialism is also on the major traditional philosophies of idealism and realism. The aim of essentialists education is to develop intellectual powers, as well as educating competent persons. Schools should therefore not be side tracked into catering to the personal problems and social needs of students.

Cultural heritage needs should be considered for curriculum making. Essential skills especially Reading, Writing and Arithmetic (three Rs) and academic subject such as English, Science and Mathematics should be given priority in the education process; with an emphasis on mastery of concepts and principles of subject matter.

As with perennialists, the curriculum is subject centred and emphasized separate organized disciplines as opposed to integrated subjects. The teacher in this case is considered an authority in his/her subject field. Moving from traditional educational philosophies, let us now examine more modern ones.

### **Progressivism**

Progressivism is one of the educational philosophies originating from **pragmatism**.

Hence all that we discussed earlier about pragmatism holds true for progressivism.

Besides Dewey’s contribution, other scholars in this area include Montessori, Corneliu, and Raisseau. Their studies and research were geared towards identifying



the most appropriate type and nature of curriculum for learners.

Progressivists education seeks to promote democratic schooling as well as social living. The other major emphasis is on a child or learner centred curriculum. The curriculum therefore is based on the learners interests, needs, abilities and aspirations, among other characteristics of the learners.

Progressive education curriculum emphasized five approaches to the teaching/ learning process, namely:-

- Teacher – pupil planning of curriculum activities
- Flexible curriculum and individualized instruction
- Learner-centred teaching and learning methodology
- Selection of study material in line with the expressed interests and concerns of the learner
- Non – formal curriculum activities and physical training in areas like games, related hobbies and other co-curricular areas.

The aim of this form of education is to provide a learning atmosphere that allows children maximum self-direction and to reduce teacher domination in the teaching/learning process.

Lets now explore reconstruction as an educational philosophy

### **Reconstructionism**

Reconstructionists hold on to an anthropological –sociological philosophy that would put schools in the forefront of remaking society.

Reconstructionism evolved from a critical perspective of the work of the progressivists; who put too much emphasis on the needs of the child sometimes at the expense of needs of society.

The aim of the reconstructionists education is to improve and reconstruct society as need be; as well as education for change and social reform. Thus, the study of contemporary social problems become the centrepiece of curriculum content.

The critical social problems might be national or global including such issues as oppression, poverty, hunger, racial/ethnic strife, war, and health issues such as HIV/Aids.

The reconstructionists believe that resources are available to solve these problems and the education profession could be the catalyst to prepare and organize future generation to make this possible. They, however try to avoid indoctrinating children; rather, they seek to lead them in rational discussion and in critical analysis of issues.



Reconstructionists use multiple teaching materials and they consider inclusion of subject matter that would be useful to serve the central cause of the issue of concern. Planning of the curriculum often involves various stakeholders including learners, parents and community leaders.

The Table below summarises the various educational philosophies. The summary highlights the philosophical base of each of the educational philosophies; Aim of education, knowledge to be emphasized on. Role of education and suggests what the curriculum should focus on as advocated for by each of the respective philosophies.

**Table 1 Overview of Educational Philosophies**

<b>Educational Philosophy</b>	<b>Philosophical Base</b>	<b>Aim of Education</b>	<b>Knowledge</b>	<b>Role of Education</b>	<b>Curriculum Focus</b>
Perennialism	Idealism Realism	To educate the Rational person; to cultivate the intellect	Focus on past and permanent studies; mastery of facts and timeless knowledge	Teacher helps students think rationally; explicit teaching of traditional values	Classical subjects; constant curriculum
Essentialism	Idealism Realism	To promote the intellectual growth of the individual; to educate the competent person	Essential skills and academic subjects; mastery of concepts and principles of subject matter	Teacher is authority in his or her subject field; explicit teaching of traditional values	Essential skills (three Rs) (Reading, Writing and Arithmetic) and essential subjects (English, science, history, maths).
Progressivism	Pragmatism	To promote democratic, social living	Knowledge leads to growth and development; focus on active and relevant learning	Teacher is a guide for problem solving and scientific inquiry	Based on students' interests; involves the application of human problems and affairs; interdisciplinary subject matter; activities and projects



Reconstructionism	Pragmatism	To improve And reconstruct society; education for change and social reform	Skills and subjects needed to identify and solve problems of society.	Teacher serves as an agent of change and reform; helps students become aware of problems confronting human kind	Emphasis on social sciences and social research methods; examination of social, economic, and political problems.
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Source: Adapted from Ornsten and Hunkins (1988)

Now carry out the following activity to consolidate your learning on educational philosophies

### Activity

1. Study the text and the table above on Educational philosophies.
- 2 a) Describe essentialism and progressivism in your own words (use 50 words in each case)
  - Essentialism
  - Progressivism
- b) What do you consider as major differences between the two philosophies? Explain your answer. (70 words)
- c) Which of the two philosophies do you consider to have had more influence on the secondary school curriculum in your country? Justify your answer. Write an essay of 250 words.

Let us now examine **theories of subject matter** related to the educational philosophies.

### Theories of Subject Matter

Based on the educational philosophies; perennialism, essentialism and progressivism, certain theories of subject matter have been advanced. The theories state as follows: these theories highlight the type and purpose of subject matter in the curriculum.

Theory 1: Subject matter should be taught for its own sake.

Theory 2: Subject matter should be taught for use.

Theory 3: Subject matter is merely a medium for teaching intellectual processes, skills, attitudes and appreciations.



Let us now expound on each of the theories.

**Theory 1:** “Subject matter should be taught for its own sake”. Supporters of this theory believe that everything has intrinsic value. They believe that each subject has value in and of itself.

Naturally then some subjects are more valuable than others, not because they are more useful than others but because they have greater intrinsic value. According to this position, whether or not the pupil will ever make use of subjects like Algebra, Latin or Physical Education does not matter. The important thing is that the learner should study subjects that have the greatest value. The task for the curriculum developer is to identify those subjects deemed to have more value.

These are views of perennialists.

**Theory 2:** “Subject matter should be taught for use”. Supporters of this theory hold that the value of a subject depends upon the use that is made of it. This position derives from the philosophical belief that value is operational instrumental.

Basically this is an essentialist’s position. According to this belief, in planning curricula, priority should be given to those studies that the learners will most likely need to know. In this sense these subjects are essential.

**Theory 3:** “Subject matter is merely a medium for the teaching of intellectual processes, skills, attitudes, ideals, and appreciations”.

Supporters of this theory are mainly the progressivists. They believe that in this changing world of changing values, no subject matter is essential for its intrinsic value; and that it is very difficult to tell which subject matter is likely to be most functional.

Therefore the progressivists believe that it is not the subject matter but the process of education that matters. In their view subject matter is only a medium by which to teach students the skills they need to become independent individuals.

Following now is a discussion on sociological foundations.



## **Sociological Foundations**

Welcome to this section on sociological foundations of curriculum.

The Sociological Foundation refers to issues from society that have an influence on curriculum. Since the school exists within a given society; and the fact that the 'products' of the school i.e. the 'graduates' go back to the society, makes the latter an inevitable determinant of the curriculum. There are many aspects of the society that need consideration in curriculum making. These include: Changes occurring in societal structures; Transmission of culture; social problems as issues for Curriculum and Economics issues.

### **Societal changes**

Changes that occur in the wider society and culture have an influence on curriculum.

Changes include:

- Family life disintegration in many of our African countries and globally; which forces the schools to take on more responsibilities previously assumed by the family.
- Movements of the population, for instance, rural-urban migration.

These issues need consideration in curriculum development. Also, some of these issues affect formal schooling for some people; necessitating the need for other modes of education, such as distance education.

Let us now discuss some of those issues, starting with culture.

### **Transmission of Culture**

Culture in any society incorporates valued traditions. In this context, curriculum can be considered to be a reflection or a piece of the culture. These traditions include those in the wider society as well as traditions upheld in the school system.

Influence of various **Interest Groups**. Certain groups who have an influence on school curriculum include: Parents, religious groups such as churches, Donors, Trade Unions such as the Kenya National Union of Teachers, Boards of Governors and the media. Each of these groups has certain values that they would want incorporated into the curriculum. As much as possible, their inputs should be considered to ensure their support in curriculum implementation.



### **Social Problems as issues for curriculum**

Every society battles with certain issues that have an influence on curriculum. These include:

- Equality and Equity issues; such as class systems in society; racial or ethnic issues; Gender; issues of access to education and equality of opportunity. Factors that affect equality of opportunity include financing of education, fees payments and distances to schools.
- Crime, Delinquency and Security issues: The curriculum would need to focus on knowledge, fairness and avoidance of the issues raised.
- Health Issues: Health challenges in many parts of the world currently include HIV/Aids, Drug abuse, pollution and other environmental issues, family life education including Birth control and family planning. HIV/Aids has in many African countries wrecked havoc leaving many learners as orphaned and vulnerable. Curriculum planning must take that issue into consideration.
- Economic Issues. There is need to incorporate in the curriculum knowledge, skills and attitudes that would facilitate economic growth at a personal and national level.

### **Political Dimension of Curriculum**

It is important to acknowledge that education is essentially a political activity. The political climate prevailing in a country is very important and significant in determining the type of schooling and curriculum for the young.

Education also has a political function; in that it promotes ideologies which influence the power structure within society. It is noteworthy also that political forces, the most powerful of which are associated with the government of the time, are responsible for allocation of resources that are necessary to support a curriculum. Hence, the need to take the politicians views into consideration in curriculum planning. In addition, a curriculum worker is also likely to have a political and ideological stand in life that would influence his/her decision making process in curriculum matters. (Shiundu & Omulando, 1992: 57).

Now focus on the following activity:

#### **Activity**

Discuss the influence of any two major sociological issues of your choice on curriculum in the field education in your country. Explain clearly how the issues have impacted on the curriculum. Structure your essay to include, aims of education, the type of content and any other aspect you would wish to discuss. (use 200 – 250 words)



## Psychological Foundations of Curriculum

Welcome to this section on psychological foundations of curriculum. The Psychological Foundations focus on insights gained from the field of psychology that have a bearing on the learning process, and consequently on the curriculum.

### Psychology of learning

Helps us to know:

- whether the children have developed adequately to be able to understand certain concepts. i.e. Ed. Psychology enables us to follow the development of children e.g. lower primary – children are at concrete stage.
- Methodology should be such that you have to use real objects to help them understand.

Abstract thinking and interpretation would need to come later.

Use of Psychology of learning in selecting objectives:

- Helps to identify and select those goals that are feasible from those that will likely take a very long time – and are almost impossible to attain depending on the age level.
  - Enables us to determine the length of time required for the attainment of a particular objective and the age levels at which learning will take place most efficiently; considering also the students.
  - To determine the conditions necessary for the learning of certain types of objectives.
  - Helps us to realize that most learning experiences produce multiple outcomes.
  - Learning which are consistent with each other, which are in that sense integrated and coherent, reinforce each other.

There are a variety of theories in the field of psychology. The most commonly used theories in most educational systems are the cognitive theories, though they have their limitations. Let us therefore examine some of these in some detail.

### Cognitive Theories

These are sometimes referred to as simply cognitive development theories or even human development theories. These theories recognize that most of the learning in schools concentrates on the cognitive dimension of learning.

Jean Piaget (1896 – 1989), a Swiss psychologist, is considered to be the hero of the human development theorists. He provided a comprehensive view of cognitive growth and development of children as occurring in progressive stages; with a fixed sequence and hierarchy of steps.





These are:

**1. Sensorimotor Stage (Birth to age 2 years)**

Child progresses from reflex operations to complex sensorimotor actions in relation to the environmental patterns. E.g. **establishing simple relations between similar objects.**

**2. Pre-operational Stage (ages 2 to 7 years)**

At this stage objects and events begin to take on symbolic meaning; e.g. a chair for sitting, clothing is what we wear, oranges and bananas are fruits; etc.

**3. Concrete Operations Stage (ages 7-11 years)**

Here the child begins to organize data into logical relationships; and begins manipulating data in problem – solving situations. Learning occurs only if CONCRETE objects are available; or drawing from actual past experiences.

**4. Formal Operations stage (ages 11-17 years)**

Characterized by the development of formal and abstract operations; including:

- Analysis of ideas;
- Logical thinking about abstract data;
- Evaluation of data
- Hypothesizing etc.

Hereditary and environmental factors may speed up or slow down cognitive development; but not change the sequence.

Most curriculum specialists and learning theorists and teachers tend to be **cognitive oriented** because:

1. The cognitive Approach constitutes a logical method for organizing and interpreting learning.
2. The approach is rooted in the tradition of subject matter.
3. Educators have been trained in cognitive approaches and better understand them in many African countries and globally.

**Note: Learning in school largely involves cognitive processes. Schools therefore tend to emphasize the cognitive domain of learning** at the expense of other aspects of learning, i.e. affective and psychomotor. Schools should therefore be more humane places where students can fulfill their human potential. Hence, let us now examine Humanistic psychology.



### **Humanistic Psychology (Humanism)**

Humanistic psychology is concerned about the human beings above all else in the universe; it centers on helping people in various ways. This theory has given rise to a focus on:

- Affective education i.e. education about feelings, attitudes, and self-esteem
- Classification of values for curriculum
- Holistic approach to education
- Top priorities being choice (for students) and responsibility

Thus, the learner should have an awareness of self. That is, the concept we hold of ourselves i.e. who we are, determines what we do; and the extent to which we learn. In other words, cognitive performance will be influenced by self-concept. Some of the scholars associated with this theory include: Maslow (1908 – 1970) and Carl Rogers.

In summary, each of the psychological theories is useful to curriculum planners as they seek alternative approaches for preparing most useful curricula for learners.

### **Activity**

1. Which of the three psychological theories would you find most useful in designing Secondary School Curriculum in your country and why (Write an essay of 200 – 300 words)
2. Visit a primary school class and observe pupils in a lower primary class (say class 2) and another primary class (say class 7) and identify differences with regard to:-
  - a) The methodology adopted by the teachers and learning materials and relate them to the developmental levels of the children on average per class.
  - b) Talk to teachers in those classes and find out how their methods relate to levels of development for the average child in those classes. Write a report of about 200 words.

### **Summary**

In this unit, we have examined foundations of curriculum; that is, the values, traditions, factors and forces which influence curriculum making. Four foundations were explored; i.e. Historical, philosophical, sociological and psychological. We established that historical foundations were those factors and issues from the past that have an influence on the curriculum at present. Examples of various forms of education from the past that have influenced were given including ancient education such as Greek and Roman education. Other examples were Renaissance, reformation and progressivism.



Philosophical foundations were presented; idealism, realism, pragmatism and existentialism. Educational philosophies discussed included perennialism, essentialism, progressivism and reconstructionism. Influence of each philosophy on curriculum was highlighted. For example, a curriculum developed by pragmatists emphasizes on considering problems that arise out of daily living. A practical curriculum therefore results from such an approach.

Sociology of education emphasizes on the need to focus on societal issues in curriculum development. These include culture and traditions, societal changes and political issues.

Psychological foundations on the other hand deals with the insights gained from the field of psychology with regard to the learning process and the influence on the curriculum. For example, psychology assists in areas such as identifying the developmental levels of children and consequently selecting learning objectives appropriate for those levels. It also assists in identifying appropriate content, methodology and conditions necessary to attain the required learning.

### **Formative Evaluation**

#### **Questions**

- 1 a) What do you understand by the term “Curriculum foundation”?  
b) Distinguish between perennialism and progressivism in relation to their influence on curriculum.
2. Which of the educational philosophies you have studied in this unit do you think is most commonly used to develop curriculum in your country? Justify your answer in an essay of about 250 words.

#### **Possible Answers**

- Q1 a) Curriculum foundation can be considered as a basis for curriculum.  
b) Perennialism – one of the traditional philosophies that advocate for permanence of curriculum and experiences being more important than change. Perennialist therefore advocates for a common curriculum for all learners. Curriculum should also contain ‘important’ subjects taught separately. Progressivism on the other hand is a modern philosophy, based on pragmatism, which emphasizes change as the essence of reality. The curriculum that results from a progressivist approach is child-centered. It should also be flexible with teacher acting as a facilitator.



Q2. You will need to analyse the curriculum in your country and establish various characteristics that would suggest a given philosophical approach. For example, if the curriculum is presented in separate individual subjects as opposed to intergration, that could suggest a traditional philosophy in use, e.g. perennialism. Secondly, if there is an emphasis on prevocational/vocational subjects, that could suggest an essentialist approach. On the other hand, a flexible curriculum with broad choices for learners could suggest a progressivist approach to curriculum making.



## Learning Activity III

### Title of Learning Activity

#### CURRICULUM DESIGN, DEVELOPMENT AND IMPLEMENTATION

Welcome to this unit on curriculum design, development and implementation. In this unit, we shall explore the meaning of curriculum design and the various approaches to designing curriculum including subject centred approach, learner centred approach among others. We shall also examine selected curriculum design models including Ralph Tyler's model, John Goodlad's model, Kerr's model among others. We shall also discuss their application to the curriculum design process. Curriculum development process is then discussed. Implementation of the developed curriculum is examined in detail, to help you understand what is involved in the process and appreciate the various tasks involved for success.

### Summary of Activity

By the end of the end of this section, you should be able to:

- Explain the concept of curriculum design, curriculum development, and curriculum.
- Discuss various curriculum design models
- Explain factors that influence Curriculum Design
- Identify the processes involved in curriculum development.
- Identify the steps involved in curriculum implementation process

### Summary

This unit will first examine the concept of curriculum design. Curriculum design is the structure or pattern of organization of a curriculum. Various approaches to curriculum design include the subject centred, learner centred and core-curriculum design approaches. Generally speaking, a curriculum design model illustrates how the various elements of a curriculum are interrelated and provides guidance for the curriculum design process. It is commonly agreed that the main elements of a curriculum include: Objectives, content, instructional methods or strategies and evaluation of learning achievements. The various curriculum design models are presented including, Ralph Tyler's model and John Goodlad's model among others. Curriculum development process follows, as well as the implementation process. Strategies to ensure successful implementation are discussed.



### **Key words**

Curriculum design: The structure or pattern of organization of the curriculum.

Curriculum design model – A set of ways to arrange curriculum.

Curriculum development: An activity which results in plans for instruction.

Curriculum implementation: Actual operationalization of the curriculum in schools.

### **List of relevant Readings**

<http://asterix.ednet.lsu.edu/~lsuctp/confpapers/Wang.htm> - Appendix IV

[http://www.ncgia.ucsb.edu/giscc/units/u159/u159\\_f.html](http://www.ncgia.ucsb.edu/giscc/units/u159/u159_f.html) - Appendix V

[http://en.wikibooks.org/wiki/Social\\_and\\_Cultural\\_Foundations\\_of\\_American\\_Education/Chapter\\_10/What\\_factors\\_influence\\_curriculum\\_design%3F\\_1](http://en.wikibooks.org/wiki/Social_and_Cultural_Foundations_of_American_Education/Chapter_10/What_factors_influence_curriculum_design%3F_1) - Appendix VI

<http://www.eed.state.ak.us/TLS/FLAMEWORKS/Langarts/intro.htm>

The Curriculum Development Process – Appendix VII

### **List of relevant Resources**

Computer; multimedia resources

### **List of relevant useful links**

[http://en.wikipedia.org/wiki/Core\\_curriculum](http://en.wikipedia.org/wiki/Core_curriculum)

[http://en.wikibooks.org/wiki/Social\\_and\\_Cultural\\_Foundations\\_of\\_American\\_Education/Chapter\\_10/What\\_factors\\_influence\\_curriculum\\_design%3F\\_1](http://en.wikibooks.org/wiki/Social_and_Cultural_Foundations_of_American_Education/Chapter_10/What_factors_influence_curriculum_design%3F_1)

### **Details of the Learning Activity**

Read through the information presented in this module carefully. You will find specific activities at various points of the presentation. Answer the questions presented in those sections as instructed.

### **Meaning of Curriculum Design**

Curriculum design is largely concerned with issues such as what to include in the curriculum and how to present it in such a way that the curriculum can be implemented with understanding and success (Barlow et al, 1984). It therefore refers to the way in which the component parts or elements of the curriculum have been arranged in order to facilitate learning (Shiundu & Omulando, 1992).



The element includes; aims, goals and objectives, content, learning activities and evaluation.

Further, Curriculum Design is concerned with issues of making a choice of what should be the organizational basis or structural framework of the curriculum. The choice of a design often implies a **value position**.

As with other curriculum related concepts, Curriculum Design has a variety of definitions

depending on the scholars involved. For example, Doll (1992) says that Curriculum Design is a way of organizing the permits curriculum ideas to function. She also adds that a curriculum design refers to structure or pattern of organization of the curriculum.

The curriculum design process results in a curriculum document that contains the following:

- A statement of purpose(s)
- An instructional guide that displays behavioural objectives and content organization in harmony with school organization.
- A set of guidelines (or rules) governing the use of the curriculum, and
- An evaluation scheme.

Thus, a curriculum should be designed to fit the organizational pattern of the school / institution for which it is intended.

How a curriculum is conceptualized, organized, developed and implemented depends on a particular country's educational objectives. Whatever design a country may adapt depends also on the country's philosophy of education.

There are several ways of designing school curriculum. These includes: Subject Centred;

Learner – centred, Broadfields; and Core-curriculum.

We shall now examine the subject centred curriculum design.

### **Subject-Centred Curriculum**

This curriculum design refers to the organization of curriculum in terms of separate subjects e.g. Geography, Maths, and History etc. This has been the oldest school curriculum design and the commonest in the world. It was even practiced by the ancient Greek educators. The subject centred design was adapted by African education systems from Europe. An examination of the Subject Centred curriculum design will show that it is used mainly in the upper primary sections,



secondary school classes and colleges. Frequently, lay people, educators and other professionals who support this design received their own schooling or professional training in this system. Teachers, for instance, are trained and specialized to teach one or two subjects at secondary school level in many countries. This type of curriculum organization is still being used in African schools today.

Let us examine the advantages and disadvantages of this approach to curriculum organization. We shall be able to see why some educators advocate for it while others criticize this approach.

### **Advantages**

1. It is possible and desirable to determine in advance what all children will learn in various subjects and grades (classes). For instance, syllabuses for all schools in centralized systems of education are prepared and approved centrally by the curriculum development body for a given country. For instance, in Kenya, the Kenya Institute of Education (KIE) prepares all the syllabuses and then sends to all the schools in the country, irrespective of geographical position, status, resources, manpower available and cultural variations.
2. It is feasible and necessary to determine minimum standards of performance and achievement for the knowledge specified in the subject area.
3. Almost all text-books and support materials present on the educational market are organized on subject by subject format.
4. Also tradition seems to give this design greater support. People have become familiar and more comfortable with this design and seem to view it as part of the system of the school and education as a whole.
5. The subject-centred curriculum is better understood by teachers because their training was based on this method. i.e. specialization.
6. The advocates of the subject-centred design have argued that intellectual powers of individual learners can be developed through this approach.
7. Curriculum planning is easier and simpler in the subject centred curriculum design.





### **Criticisms of Subject-Centred Design**

Critics of subject-centred curriculum design have strongly advocated a shift from it.

These criticisms are based on the following arguments:

1. Subject-centred curriculum tends to bring about a high degree of fragmentation of knowledge.
2. Subject-centred curriculum lacks integration of content. Learning in most cases tends to be compartmentalized. Subject or knowledge are broken down into smaller seemingly unrelated bits of information to be learned.
3. This design stresses content and tends to neglect the needs, interests and experiences of the students.
4. There has always been an assumption that information learned through subject matter curriculum will be transferred for use in everyday life situations. This claim has been put into doubt by many scholars who argue that automatic transfer of the information already learned is not possible.

In view of the criticisms above, let us now examine learner centred curriculum design

### **Learner – Centred / Child-centred Curriculum**

The curriculum designs which come under the name learner-centred may take various forms sometimes referred to as individualized approaches. In this design, the curriculum is organized around needs, interests, abilities and aspirations of students.

Advocates of the design emphasize that attention should be paid to what is known about human growth, development and learning. Planning this type of curriculum should be done along with the students, after identifying their varied concerns, interests and priorities and then develop appropriate topics as per the issues raised.

This type of design requires a lot of resources and manpower, in order to cater for the variety of needs. Hence, the design is more commonly used in the developed countries, while in developing world the use is more limited.

To support this approach, Hilda Taba (1962) stated:

Children like 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.



### **Advantages of Learner-Centred design**

Some of the advantages are:

1. The needs and interests of students are considered in the selection and organization of content.
2. Since the needs and interests of students are considered in the planning of students work, the resulting curriculum is relevant to the students world.
3. The design allows students to be active and acquire skills and procedures that will be applicable to the outside world.

### **Criticisms of Learner – Centred approach**

Arguments against the learner centred design include:

1. The needs and interest of students may not be valid or long lasting. They are often short-lived.
2. The interests and needs of students may not reflect specific areas of knowledge that could be essential for successful functioning in the society in general. Quite often, it has been observed that the needs and interests of students are not those that are important for society in general.
3. The nature of the education systems and the society in many countries particularly the developing ones may not permit learner-centred curriculum design to be implemented effectively.
4. As pointed out earlier, the design is expensive with regard to resources, both human and fiscal, that are needed to satisfy the needs and interest of individual students.
5. This design is sometimes accused of shallowness. It is argued that critical analysis and in-depth coverage of subject content is inhibited by the fact that students needs and interests guide the planning process.

### **Activity**

1. Based on your experience in your education system write down what you would consider to be two (2) other advantages and two (2) disadvantages of subject-centred curriculum, that were not mentioned in the text above (75 words).
2. Review and summarise the characteristics of Learner-Centred designs.
3. Discuss two advantages of learner centred designs, in the context of your secondary school curriculum. Write an essay of 100 words.
4. Which of the 2 approaches, subject centred and learner centred do you think is more popular in curriculum design in your country and why?



Let us now examine the broad field curriculum design

### **Broad-Fields Curriculum**

In the broad-fields curriculum design two, three or more subjects are unified into one broad course of study. This organization is actually a system of combining and regrouping subjects that are related in the curriculum.

The broad-fields approach attempts to develop some kind of synthesis or unity for the entire branch or more branches of knowledge into new fields.

Some examples of broad fields include:

1. Language Arts – This incorporates Reading, writing, grammar, literature, speech etc. Kiswahili and foreign languages.
2. General Science – to include Natural and Physical Sciences
  - a. Physics, Chemistry, Geology, Astronomy, Physical Geography.
  - b. Zoology, Botany, Biology and Physiology
3. Others include:
  - Environmental Education
  - Family Life Education

Advocates of broad-fields designs believe that the approach would bring about unification and integration of knowledge. However, looking at the trend of events in curriculum practice in many African countries this may not have materialized effectively.

The main reason is probably that teachers are trained for two subjects at the University and diploma levels; thus making it difficult for them to cope with more areas than that. For instance, general science would require say Physics, Chemistry, Biology and Geography, while most science students would have covered only two of them.

### **Advantages of Broad-Field Design**

The advocates of Broad-Field argue that:

1. It is based on separate subjects, so it provides for an orderly and systematic exposure to the cultural heritage.
2. It integrates separate subjects into a single course; this enables learners to see the relationships among various elements in the curriculum.
3. It saves time on the school time-table.



### **Criticisms**

Opponents of Broad-Field curriculum design claim that;

1. It lacks depth and cultivates shallowness.
2. It provides only bits and pieces of information from a variety of subjects.
3. It does not account for psychological organization by which learning takes place.

You are now ready to tackle the following activity to consolidate your learning

### **Activity**

1. Examine the present syllabus for secondary education in your country and identify what aspects you would consider to be in line with broad-fields curriculum design. (Justify your answer). Use 100 words in your write-up.
2. Assess the extent to which the approach has been successful in developing Curricula in secondary schools in your country; by examining 2 broad areas.
3. Give two advantages and two criticisms of this broadfields curriculum design – explain why. (50 words each)
4. Read Appendix IV: “Curriculum Design Model and The Enlightenment. The article provides you with further information on curriculum designs and application in the Peoples Republic of China.
5. Summarize the main points that should be considered in designing curriculum from the article (250 word).

The following section examines co-curriculum design. Let’s find out more about them.

### **Core-Curriculum Design**

#### **Meaning of Core-Curriculum**

The concept core-curriculum is used to refer to areas of study in the school curriculum or any educational programme that are required by all students. The core-curriculum provides students with “common learning” or general education – that is considered necessary for all. Thus, the core-curriculum constitutes the segment of the curriculum that teaches common concepts, skills, and attitudes needed by all individuals in order to function effectively within their society.



### Characteristics of Core-Curriculum Design

The basic features of the core-curriculum designs include the following:

1. They constitute a section of the curriculum that all students are required to take.
2. They unify or fuse subject matter, especially in subjects such as English, social studies etc.
3. Their content is planned around problems that cut across the disciplines. In this approach, the basic methods of learning is problem solving using all applicable subject matter.
4. They are organized into blocks of time; e.g. two or three periods under a core teacher. Other teachers may be utilized where it is possible.

### Types of Core-Curriculum Designs

The following types of core-curriculum are commonly found in secondary schools and college curriculum in many African countries.

**Type One:** Separate subjects taught separately with little or no effort to relate them to each other. E.g. Mathematics, Science, Languages, and Humanities may be taught as unrelated core-subjects in high schools.

**Type Two:** The Fused-core

The fused-core is based on the overall integration of two or more subjects; for example,

1. Physics, Chemistry, Botany and Zoology may be taught as General Science.
2. Environmental Education – this is an area with interdisciplinary approach in curriculum planning.
3. History, Geography, Economics, Sociology and Anthropology may be combined and taught as Social Studies.

### Activity

1. In your own words, explain the concept of core-curriculum (25 words).
2. State three characteristics of a core-curriculum design, using examples from the secondary school curriculum in your country.
3. Examine the secondary school curriculum in your country and write subjects that are compulsory for all students to learn from Form 1 to Form 4.
4. Find out and write down the areas of study that you and all other AVU BED Science degree students must study and pass before they are awarded degrees, which constitute your core- curriculum.



We shall now examine curriculum design models.

### **Curriculum Design Models**

There are a variety of curriculum design models to guide the process. Most of the designs are based on Ralph Tyler's work, which emphasizes on the role and place of objectives in curriculum design. We shall therefore begin by examining the Ralph Tyler's Model, followed by John Goodlad's and a few others.

#### **RALPH TYLER'S MODEL**

Tyler's Model (1949) is based on the following FOUR basis/fundamental questions he posed, for guiding the Curriculum design process. These are:-

1. What educational purposes should the school seek to attain?
2. What educational Experiences can be provided that are 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?

Schematically, the Tyler's model can be presented as shown in the following page.

Study that model carefully and continue reading on the application of the model to curriculum design.

#### **Application of Ralph Tyler's model in Curriculum Design**

In applying Tyler's model to curriculum design, the process starts with coming up with objectives for the curriculum. Because of its emphasis on importance of objectives, it is considered to be an objective based model. This process starts with analyzing information from various data sources.

Data sources for curriculum according to Tyler include:

- Contemporary society/life. For this source, the designer analyses the issues affecting society that could be solved through education. Examples of these are; cultural issues, socio-economic issues, and health issues such as HIV/Aids among others.
- Learner's needs and interests.
- Subject specialists / subject matter.

From these sources, the designer comes up with **educational purposes/general objectives**. These are subjected to a screening process, using **philosophy of education** and **psychology of learning** as the major screens. **Social values** are also used as a screen, but sometimes these are subsumed in philosophy of education.



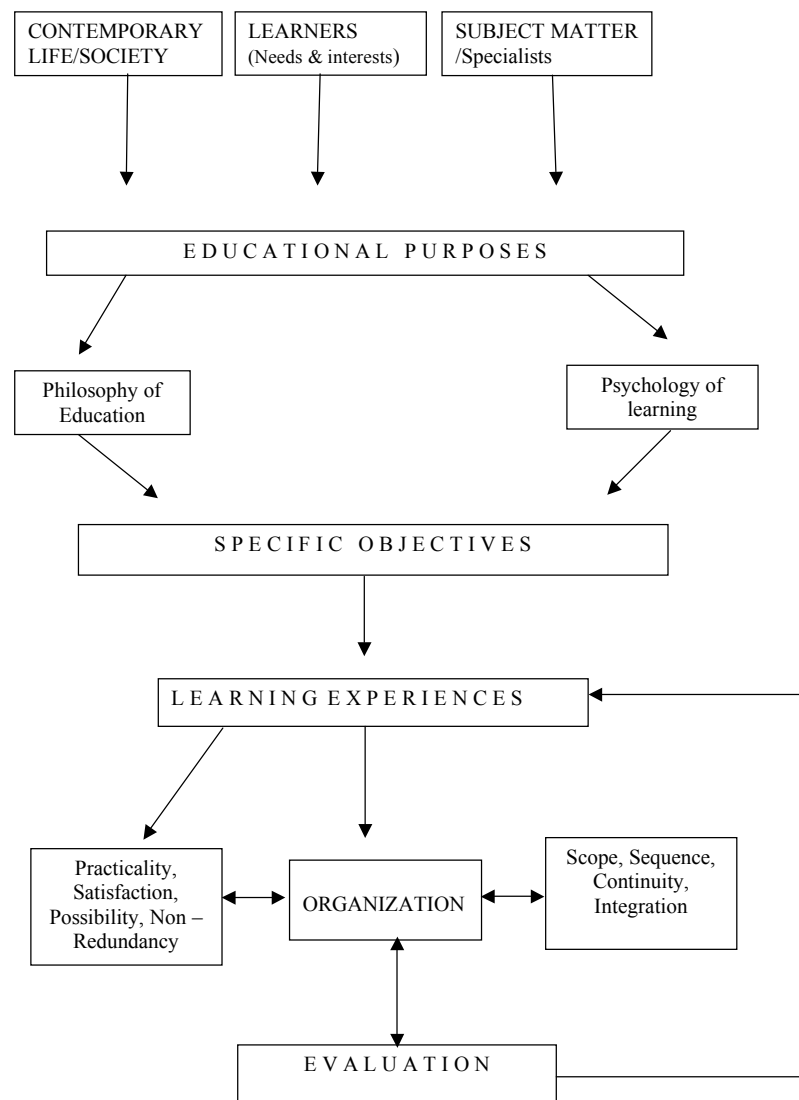
This yields a feasible number of objectives that can be focused on in education.

**Specific objectives** are then derived from the general objectives. For each of the specific objectives, **Learning Experiences** are identified. In this context, the learning experiences include the subject matter / content and the learning activities.

The next step is **Organisation of learning experiences**. This is done to ensure effective learning takes place. The various principles of organization include: scope, sequence, integration, continuity, among others. The final step involves **Evaluation**, to determine the extent to which the objectives have been met.

Feedback from the evaluation could then be used to modify the learning experiences and the entire curriculum as found necessary.

#### RALPH TYLER'S MODEL





## **Learning Experiences**

Learning experiences refer to the interaction between the learner and the external conditions in the environment which he/she encounters. Learning takes place through the active behaviour participation of the students; it is what the student is involved in that he/she learns not what the teacher does.

The problems of selecting learning experiences is the problem of determining the kind of experience likely to produce given educational objectives and also the problem of how to set up opportunity situations which will evoke or provide within the student the kinds of learning experiences desired.

### **General Principles in Selecting Learning Experiences**

1. Provide experiences that give students opportunities to practice the behaviour and deal with the content implied.
2. Provide experiences that give satisfaction from carrying on the kind of behaviour implied in the objectives.
3. Provide experiences that are appropriate to the student's present attainments, his/her predispositions.
4. There are many particular experiences that can be used to attain the same educational objectives.
5. The same learning experience will usually bring about several outcomes.

### **Selection of Subject Matter/Content**

The term subject matter / content refers to the data, concept, generalizations and principles of school subjects such as mathematics, biology or chemistry that are organized into bodies of knowledge sometimes called disciplines. For instance, Ryman (1973) specifically defines content as:

Knowledge such as facts, explanations, principles, definitions, skills and processes such as reading, writing, calculating, dancing and values such as the beliefs about matters concerned with good and bad, right and wrong, beautiful and ugly.

Selection of content and learning experience is one crucial part in curriculum making. This is mainly because of explosion of knowledge has made the simplicity of school subjects impossible. As specialized knowledge increases it is necessary either to add more subjects or to assign new priorities in the current offerings to make room for new knowledge and new concepts.

New requirements for what constitutes literacy have also emerged. In secondary schools the usual method of accommodating new demands has been to introduce new subjects or to put new units into existing subjects.





Improved educational technology such as use of television, radio, tapes, presumably permits an expansion of what can be learned in a given period of time. New technical aids for self-teaching, for communicating information and for learning a variety of skills are shifting the balance of time and effort needed for acquiring a substantial portion of the curriculum.

*What then are the criteria for selection of content?*

### **Criteria for the Selection of Content**

There are several criteria that need to be considered in selecting content. These include: validity, significance and needs and interests of learners.

#### **Validity**

The term validity implies a close connection between content and the goals which it is intended to serve. In this sense, content is valid if it promotes the outcomes that it is intended to promote.

#### **Significance**

Significance of curriculum content refers to the sustainability of the material chosen to meet certain needs and ability level of the learners.

#### **Needs and Interests of the Learner**

The needs and interests of the learners have to be considered in the selection of content, to ensure a relevant curriculum to the student's world. Also ensures the students will be more motivated to undertake the curriculum.

#### **Utility**

In this context, subject matter of a curriculum should be selected in the light of its usefulness to the learner in solving his/her problems now and in the future.

#### **Learnability**

Curriculum content should be learnable and adaptable to students' experiences. One factor in learnability is the adjustment of the curriculum content and of the focus of learning experience to the abilities of the learners. For effective learning the abilities of students must be taken into account at every point of the selection and organization.

#### **Consistency with Social Realities**

If the curriculum is to be a useful prescription for learning, its content and the outcomes it pursues need to be in tune with the social and cultural realities of the times.



Now go ahead and do the following activity.

### Activity

Discuss the general principles of selecting learning experiences using your subject of specialization. You can use the following approach:

1. First, write down 2 objectives from your subject area.
2. For each objective specify the most appropriate learning experiences (i.e. content and activities)
3. Explain how you would go about selecting those experiences.(75 words)

*You have just completed a detailed discussion Ralph Tyler's to curriculum design. Let examine another commonly acknowledged model, the John Goodlad Model.*

### JOHN GOODLAD'S MODEL

The schematic presentation of the John Goodlad's model is presented on the next page. John Goodlad's model deviates a bit from the Ralph Tyler's model. It is particularly unique in its use of social values. Whereas Tyler considers them as a screen, Goodlad proposes they should be used as data sources. Hence, Goodlad proposes four data sources: Values, Funded knowledge, Conventional wisdom and students needs and interests.

Examine the schematic model on John Goodlad and continue reading on

Let us now discuss each of the data sources for further clarity.

**Funded knowledge** is that knowledge which is gained from research. Generally, Research is heavily funded by various organizations. Information from research should be used to inform educational practice in all aspects and hence in curriculum design.

**Conventional wisdom** includes specialized knowledge within the society, for example from experts in various walks of life and 'older' wise persons.

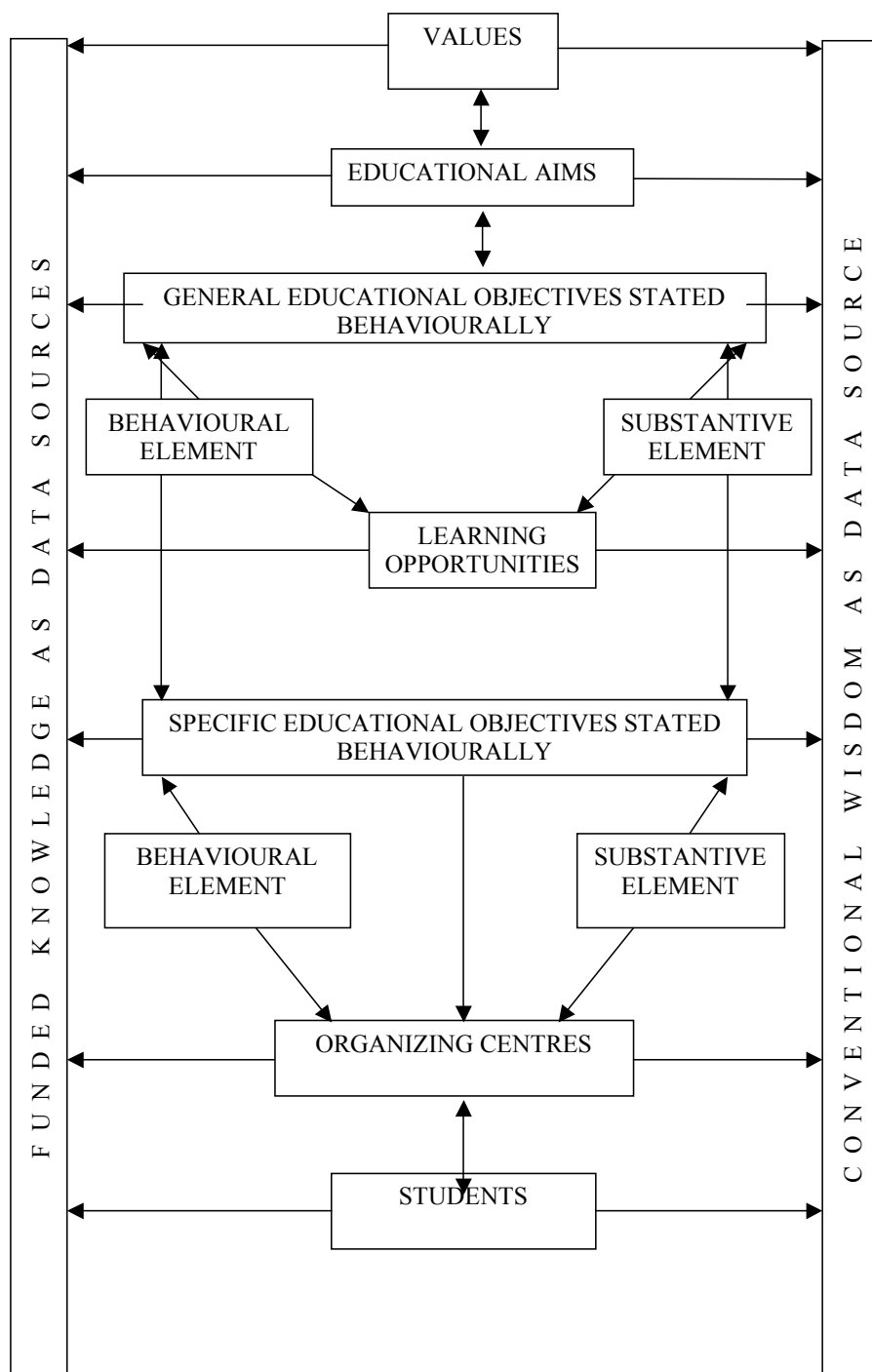
**Students' needs and interests** should also be taken into consideration in the design process.

Data from the various sources is then used to develop **general aims** of education, from which **General Educational** objectives are derived. These objectives should be stated in behavioural terms. A behavioural objective has two components: a behavioural element and a substantive element. Behavioural element refers to the 'action' that a learner should be able to perform, while the substantive element represents the 'content' or "*substance*" of the behaviour.



From the general objectives, the curriculum designer identifies **learning opportunities** that will facilitate the achievement of the general objectives. This could, for example, be specific courses of study.

**JOHN GOODLAD'S MODEL**





The next step involves deriving **specific educational objectives**, stated behaviourally. These are now akin to instructional objectives. They are used to identify “**organizing centers**”; which are specific learning opportunities. For example, a specific topic, a field trip, an experiment, etc.

Regarding **evaluation**, Goodlad proposed continuous evaluation at all stages of the design process. In the model, evaluation is represented by the double edged arrows that appear throughout the model.

*How then does Tyler’s Model differ with that of John Goodlad’s? Let us find out.*

### **Basic Differences Between Ralph Tyler’s Model and John Goodlad’s model.**

Goodlad’s model departs from the traditional model based on Tylers work through a number of features:

- 1) Goodlad recognizes and reverences scientific knowledge from research
- 2) Use of explicit value statements as primary data sources
- 3) Introduction of organizing centres, the specific learning opportunities
- 4) Continuous evaluation which is used as a constant data source; not only as a final monitor of students progress (formative evaluation); but also for checking each step in the curriculum planning process. Hence, the model insists upon both formative and process evaluation.

Curriculum Literature still has many more models for design. We shall highlight a few of them.

### **Other Curriculum Designs**

There are many other curriculum design models by different scholars. Most of those models are objectives based, i.e. they focus on objectives as the basis upon which the entire design process is based, and draw a lot from the work of Ralph Tyler. We shall examine a few of those models; Wheeler Model, John Kerr’s, and Hilda Taba’s model.

Let’s start by looking at the Wheeler model.

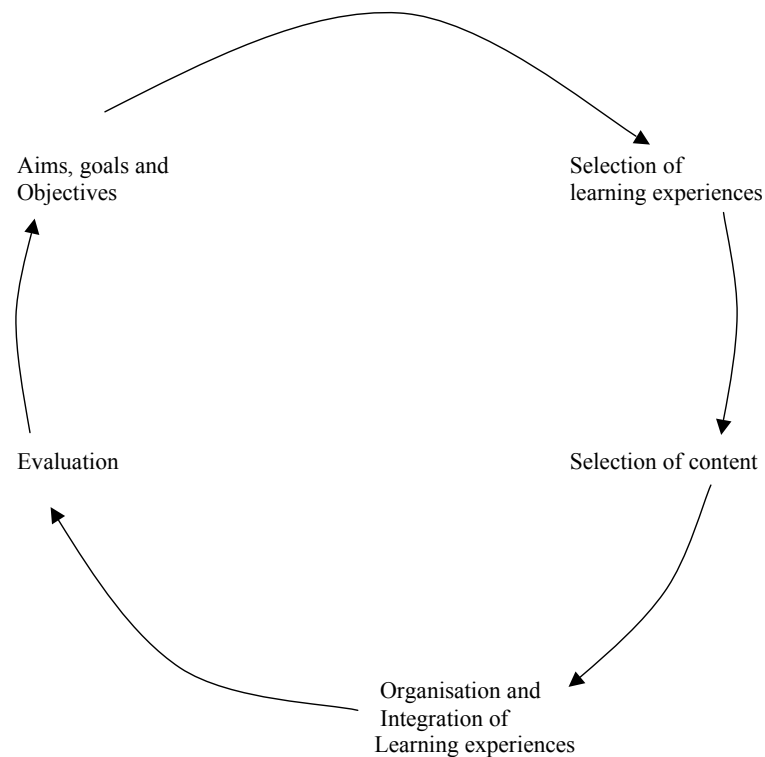
### **THE WHEELER MODEL (1967)**

Wheeler came up with a cyclic model (see figure below) in reaction to criticism levelled at the Ralph Tyler’s model. The latter was seen as being too simplistic and vertical. By being vertical it did not recognize the relationship between various curriculum elements. His cyclic proposal was therefore aimed at highlighting the interrelatedness of the various curriculum elements. It also emphasizes the need to use feedback from evaluation in redefining the goals and objectives of the curriculum.



Following now is a visual presentation of the Wheeler model.

### WHEELER MODEL



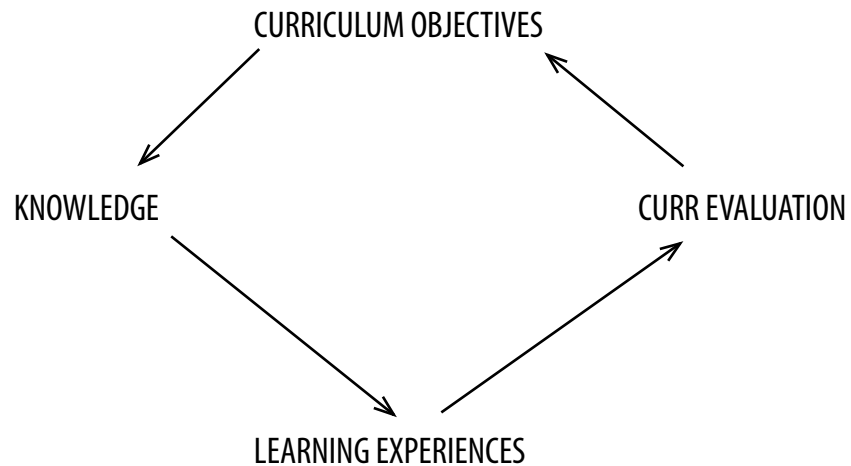
### JOHN KERR'S AND HILDA TABA'S MODEL

Other scholars who were also convinced of the 'objectives' approach to curriculum design were John Kerr and Hilda Taba. Their work is summarized in the simplified models presented in the figures that follow. Both of them emphasize on the interrelatedness of the various curriculum elements. John Kerr, a British Curriculum specialist in the 1960s, was particularly concerned with the following issues: objectives, knowledge, school learning experiences and evaluation.

This is reflected in the sketch below.



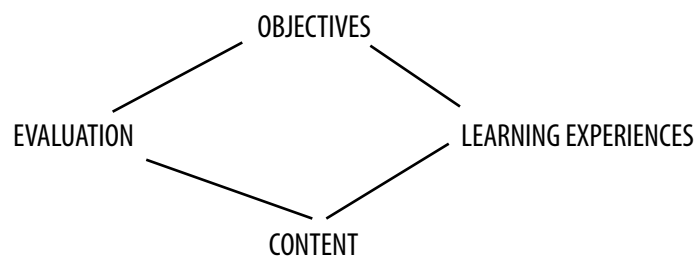
### JOHN KERR'S SIMPLIFIED MODEL



Notice that Kerr's model is in many ways similar to that of Ralph Tyler and Wheeler. The additional credit to his work is the emphasis on interrelatedness of the various components.

Hilda Taba on her part was also influenced by Ralph Tyler. Her conceptual model follows. The interrelatedness of the curriculum elements from both models suggest the process is continuous.

### HILDA TABA'S MODEL





### **Factors that Influence Curriculum Design**

There are several factors that need to be taken into account when designing curriculum.

These include:

- Teacher's individual characteristics
- Application of technology
- Student's cultural background and socio-economic status
- Interactions between teachers and students
- Classroom management; among many other factors.

The following activity will give you an opportunity to explore the factors in more detail. Go ahead and complete the activity before you continue.

#### **Activity**

1. Read the article on "What factors influence Curriculum Design" – Appendix VI.
2. Write an essay of 300 words on which Three of the five factors presented in the article are most crucial in curriculum planning for students success in your country at secondary level. Justify each of the choices. (You may discuss the factors with an experienced teacher for further understanding).

We shall now explore the concept of curriculum development

### **Curriculum Development**

#### **What is Curriculum development?**

As with most concepts in the field of curriculum studies, the term curriculum development is explained different by different scholars, albeit the underlying meaning is basically the same.

To start with, the term curriculum development is used to describe the building of a curriculum. In other words, it is an activity which results in plans for instruction. It can also be considered as "a systematic process of determining the content to be imparted, the pedagogy suitable for doing so, the structure through which it may be carried out most effectively and determination of how such a process will be evaluated" (Rodman, 1970).



Another interesting perspective is that “Curriculum development is the means by which new content and supporting materials are added to the school. Thus, curriculum development is both a logical and a creative way to add new learning experiences to the lives of students.

### **Processes involved in Curriculum Development**

The curriculum development is a comprehensive, ongoing process that involves a series of stages. Different scholars propose varied steps for the process. For example, one detailed process consists of the following steps:

Another more detailed process includes the following steps:

- Feasibility study, to establish the need for improving or changing existing curriculum
- Determining and analyzing the needs

These needs include; social, economic, political and environmental factors and changes which influence and affect education.

Technological factors

Learning needs

Examining government documents such as development plans, international conventions and declarations such as the millennium development goals etc.

- Formulation of goals and objectives
- Design of learning experiences; including decisions on content and learning activities
- Selection and development of teaching and learning resources
  - Learning materials
  - Teachers materials
  - Institutional support facilities e.g. classrooms, workshops, laboratories and equipment.
- Try out / Pilot testing
- Implementation
- Evaluation
- Appraisal, research and reconstruction Lets expound on a few of the steps.

### **Tryout / Pilot Project stage**

At this stage the curriculum changes are tried out in a few carefully selected schools. This is followed by evaluation of the pilot project during and after the trial period; analysis of evaluation results and modification of the curriculum as need be.





## Implementation

After refining the Curriculum from the piloting process, implementation to all participating schools is carried out. This involves:

- Preparation/in-servicing of the implementers: teachers, administrators and other education personnel. This is done through seminars, workshops and courses for up-dating knowledge and required skills.
- Dissemination of relevant information to the public and other stakeholders expected to support the curriculum changes.
- Actual implementation accompanied by administration and management of new programme.
- Monitoring and evaluation; Both formative and summative evaluation is crucial.
- Appraisal – making adjustments and modifications or improvement of the programme in line with evaluation results.

We have discussed the above detailed process for curriculum development to prepare you adequately in order not to miss any details when you get involved with curriculum development. However, other scholars present fewer steps. Let us now examine another proposal with only six steps. These are:

Policy formulation, conceptualization and pre-planning

- Formulation of aims, goals and objectives
- Selection of teaching and learning experiences
- Selection of content
- Organisation and integration of learning experiences
- Pilot testing and preparation for curriculum implementation

A close look at the two proposals should convince you that the tasks involved are the same. The following section will present to you the importance of team work in curriculum development.

## Curriculum Development as Team Work

Curriculum Development process is essentially a team effort. It should be a collaborative effort between various experts and stakeholders.

*Why should we involve many people in curriculum development?*

The essence of this is to develop understanding and ownership of the programme by the participants. This ensures that effective instructional and assessment strategies as well as a supportive school environment. The latter is a combined effort of all stakeholders, including parents and communities who should participate in providing resources for curriculum implementation.



Now work out the following activity before you proceed.

### Activity

1. Read the article - The Curriculum Development Process – Appendix 7
2. From the document and the text presented above, explain the basic difference between the approach to curriculum development in the past and the current practice proposed in the document. (100 words)
3. Analyse the underlying assumptions for a successful curriculum development process.

Identify three of the assumptions that you consider most important. Use the suggested format. Justify your choice.

#### Assumption

#### Justification (50 words for each assumption)

- a)
- b)
- c)

4. Identify Two conditions that you would consider key in developing a curriculum, and explain why? (100 words).
5. What Two issues do you think hamper the development of curricula that adequately address learners needs in your country and why? (200 words)

## CURRICULUM IMPLEMENTATION

### What is Curriculum Implementation?

Implementation is viewed as the actual operationalization of the curriculum in schools. It therefore involves translating curriculum designs into classroom activities and changing people's attitudes in order to accept and participate in curriculum activities.

The process also involves preparation and making available materials/resources necessary for successful curriculum implementation. Equally important is provision of administrative support for smooth coordination and management of the implementation process.

As indicated above, curriculum implementation is the process in which the curriculum is operationalized in all the schools targeted.

Ideally, curriculum implementation should follow the following steps:



### **1. Sensitization, mobilization and orientation of the stakeholders to the curriculum**

This is the stage where all concerned with implementation: teachers, parents, administrators; the community and the learners themselves are sensitized and well informed about the curriculum. This can be done through a variety of strategies including mass media among others.

The main purpose of this stage is to create ownership of the curriculum and thus enhance support of the programme.

### **2. Pre-testing the curriculum**

This involves testing the curriculum in a few schools. It entails:

- Selection of sample schools
- Training curriculum implementers in the sample schools
- Preparation and distribution of sample materials
- Monitoring and evaluation

### **3. Monitoring and Evaluation of the pre-testing stage**

Some of the areas that need monitoring and evaluation are:

- Distribution of syllabuses
- Topics coverage and sequence
- Required competencies and skills of implementers.
- Appropriateness of materials
- Teacher preparation

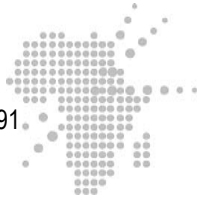
### **4. Revision of curriculum based on results of monitoring and evaluation**

Based on feedback from the data in the participating schools, appropriate revision is carried out. This is to ensure a relevant curriculum that addresses the needs identified at the beginning of the process.

### **5. Implementation of curriculum to all targeted schools e.g. on a national scale.**

This involves:

- Distribution of syllabus
- Making curriculum support materials available
- Preparation of implementers including:
  - Teachers
  - Parents
  - Educational supervisors and inspectors and other field officers
- Social marketing; for continuous support



### **What then are the main tasks in curriculum implementation process?**

There are two main tasks involved in the implementation process. These are:-

1. Changing stakeholders attitudes; i.e. ensuring positive attitudes for all who would participate in the process including policy makers, administrators, teachers, teacher trainers, education official especially supervisors, other members of the public and the learners themselves.
2. Providing materials and administrative support for successful implementation.

Let us now examine strategies for accomplishing the above tasks.

#### **Strategies for Changing Attitudes**

The main strategies for changing attitudes include persuasion, dissemination of information and educating the stakeholders.

##### **Persuading the Stakeholders**

This is crucial because implementation is a team effort. It also involves change process and naturally people tend to resist change for various reasons.

To accept the new curriculum and support it, the stakeholders need to be persuaded that it is a useful project. Persuading can be done through the use of mass media, seminars, workshops, public lectures among other means.

##### **Dissemination of information and keeping the public informed**

The importance of the new curriculum needs to be understood thoroughly by all concerned. Various methods include use of mass media, personal contacts, seminars, workshops, public forum and lectures.

##### **Educating and training of Personnel**

All the implementers including teachers, teacher – trainers, educational administrators, supervisors, inspectors need to be re-trained. The focus should be on the new skills, practices, concepts, knowledge and ideas in the new curriculum.

##### **Strategies for providing the necessary resources; facilities, equipments and materials**

The physical facilities necessary, including classrooms, laboratories, workshops need to be in place for smooth implementation. Equipment and tools, as well as materials such as text books, Audio-visual materials should be prepared and supplied to all the participating schools. This facilitates smooth implementation process.



The following activity is designed to give you an opportunity to practice what you have learnt on curriculum implementation.

### Activity

- Identify any curriculum project or programme in your country, through searching for relevant documents; if possible, identify an evaluation document on the project; or discuss with an experienced educator about the project.
- Analyse the process of implementation of the project and identify the steps undertaken in the process. Also analyse the successes.
- Write an essay (300 words) on the implementation process of the identified project programme including:
  - Title of project
  - Reference/source of information (Remember to include Author, year, title, city or publication and publisher)
  - When project was initiated and implemented
  - Where implemented
  - Objectives of the programme/project
  - Detailed steps of the implementation process
  - Identify the successes and challenges of the process
  - Make suggestions on what could have been done to improve the process

What then have you learnt in this UNIT?

### Summary

This unit examined three major concepts in curriculum; i.e. design, development and implementation of curriculum. Curriculum design was described as the structure or pattern of organization of a curriculum.

Various approaches to curriculum design were presented including subject centred, learner centred and core curriculum. Curricular design models were presented including Ralph Tyler and John Goodlad's model among others.

Curriculum development can briefly be described as the building of a curriculum. It involves determining the content to be imparted, the pedagogy, and establishing means of evaluating the learning process. Detailed steps of curriculum development were provided.

Curriculum implementation was described as the actual operationalization of the curriculum in schools. It basically involves two main tasks i.e. changing stakeholders attitudes to ensure support for the new curriculum by all and secondly,



provision of teaching/learning materials as well as administrative support to ensure successful implementation.

### **Formative Evaluation**

#### **Questions**

1. Explain in your own words what you understand by “Curriculum design”. (50 words)
2. Differentiate Ralph Tyler’s objectives based model and John Goodlad’s model. Use the following as guidelines.
  - a) Sources proposed for data collection for curriculum by each scholar (50 words)
  - b) How are values used in the two models? (50 words)
  - c) When and how is evaluation done? and for what purpose (100 words)
3. Which of the two models would you use in developing curriculum in your area of specialization (e.g. in Maths, Physics, etc) in your country at secondary level. Justify your choice of model through writing an essay of about 200 words. Provide specific examples in your discussion to justify your choice of model.
4. Discuss the two main tasks involved in curriculum implementation.

#### **Possible Answers**

- Q1. Curriculum design is the structure or organization of a curriculum. (Expand in your own words)
- Q2. Difference between Tyler’s approach and that of John Goodlad to curriculum design.
  - a) Sources of objective:  
Tyler proposes society, learners and subject specialist.  
While John Goodlad on the other hand proposes Values, Students (Learner), Funded knowledge (from research), Conventional wisdom and Feedback data from continuous evaluation.

*Expand on each of the above in your own words*



b) Use of values

Tyler uses values as a screen for educational objectives, i.e. to select the feasible objectives, while John Goodlad uses them as a data source.

c) Evaluation

Tyler proposes evaluation at the end of the programme to provide data for making decision on the curriculum such as reviewing and modifying etc. John Goodland on the other hand proposes continuous evaluation throughout the entire process of curriculum making. The information obtained provides feedback as the process continues and revisions are expected to be made accordingly and in a timely manner.

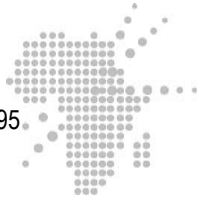
Q3. The choice you make for your answer will depend on the merits and demerits you attach to the two models. Information from your answers in question 2 above will be helpful.

Q4. Main tasks involved in curriculum implementation are:

- Changing attitudes for all stakeholders.
- Providing teaching and learning materials and administrative support.

Changing attitudes aims at ensuring ownership and support of curriculum project. This can be done through persuasion sharing information and education.

*Expound on these and give examples from the education system in your country*



## Learning Activity IV

### Title of Activity

### CURRICULUM EVALUATION

#### Summary of the Learning Activity

At the end of this unit, you should be able to:-

- Define the term evaluation
- Explain the nature and purpose of evaluation
- Distinguish between monitoring and evaluation
- Describe various types of evaluation
- Explain the criteria for evaluation
- Discuss various approaches to evaluation

#### Summary

Through studying this unit, you will learn that evaluation is the process of establishing if curriculum objectives have been achieved. You will learn that evaluation is key in determining the success or failure of a programme.

There are three types of evaluation: Pre-assessment, e.g. the exercise you underwent when you started this module on curriculum studies, to check the entry behaviour of the learners; formative evaluation i.e. the ongoing evaluation to check on progress during implementation, and summative evaluation, at the end of the programme. Evaluation helps to establish the worth of a programme and make decisions on whether to continue, stop or modify the project. The various tools of collecting data and the sources of the data will be also discussed.

#### Key words

**Curriculum evaluation** – Process of establishing the extent to which curriculum objectives have been achieved.

**Assessment** – Process to check if there is a change in learners behavior.

**Measurement** – Means of determining the degree of achievement of a particular objective.





**Testing** – Use of instruments for measuring achievement.

### **List of relevant readings**

### **List of relevant resources**

Computer with internet facility to access relevant information, links and copyright free resources.

Multimedia resources

### **List of Useful Links**

[http://en.wikibooks.org/wiki/Social\\_and\\_Cultural\\_Foundations\\_of\\_American\\_Educatio\\_Second\\_Edition/15.1.2\\_1](http://en.wikibooks.org/wiki/Social_and_Cultural_Foundations_of_American_Educatio_Second_Edition/15.1.2_1)

### **Detailed description of the activity**

Read through the text in this unit carefully. You will find exercises at the end of this unit, which you are expected to respond to as instructed.

### **Meaning of Evaluation**

Let us start by examining the meaning of the term evaluation.

As with most terms in curriculum studies, there are a variety of definitions given to evaluation. Evaluation, simply described, is the process of establishing the extent to which the objectives of a programme have been achieved. It can be also be defined as “an objective process for determining the performance of a programme.” Thus, evaluation is a judgemental process, aimed at decision – making. Doll (1992) also defines evaluation as a broad and continuous effort to inquire into the effects of utilizing educational content and process to meet clearly defined goals.

Yet another definition states that “evaluation is a process of collection and provision of data for the sake of facilitating decision making at various stages of curriculum development. (Shiundu & Omulando, 1992, p. 185)

Thus, curriculum evaluation refers to the process of collecting data in a systematic manner for the purpose of assessing quality, effectiveness and worth of a programme. The process of curriculum development and implementation should raise issues like:-

- What are the objectives of the programme? Are these objectives relevant to the needs of the individual and society?



- Can these objectives be achieved?
- What are the methods being used to achieve these objectives?
- Are the methods the best alternatives for achieving these objectives?
- Are there adequate resources for implementing a curriculum?

*Let us now examine other terms associated with evaluation.*

There are certain terms that are closely related with evaluation. These include assessment, measurement and testing.

### **Assessment, Measurement and Testing in relation to Evaluation**

The above four terms are closely related. It is necessary for you to be able to distinguish between them. Following is a brief explanation for each term.

**Assessment:** is that process which will show whether there has been a change in students behaviour. (Note: Learning can be defined as change of behaviour in a desired direction).

The change revealed through assessment can be given a value by quantifying procedures that can be referred to as educational measurement.

**Measurement:** is the means of determining the degree of achievement of a particular objective or competency. It therefore refers to the determination of the actual educational outcomes and comparing these with intended outcomes as expressed in the objectives of the programme.

Measurement gives a quantitative value to the change in students behaviour.

**Testing,** on the other hand is the use of instruments for measuring achievement.

Measurement and testing are ways and tools of collecting information for assessment and evaluation.

**Evaluation:** In the above context is the process of giving value judgement based on the information gathered through measurement and testing.

### **Monitoring versus Evaluation**

We shall now highlight the difference between the two terms, which are closely related.

**What is monitoring?** It is the continuous review of progress of planned activities. Put differently, it is the routine, daily, weekly or monthly assessment of ongoing activities and progress. Monitoring focuses on what is being done.



It is centred on two questions:

- 1) Is the curriculum project reaching the specified target population?
- 2) Are the various practices and intervention efforts undertaken as specified in the curriculum project design? Monitoring is important in examining the inputs and outputs. Indeed it can be considered as “Process evaluation”. Monitoring thus helps to ensure that the implementation is on course.

**Evaluation, in relation to monitoring** is the episodic assessment of the overall achievement. It examines what has been achieved, or what impact has been made.

### **Purposes of the Evaluation**

Evaluation should serve the following purposes:

#### **a) Individual Students**

- To discover what the students have learnt (knowledge, skills, attitudes and adjustment etc)
- The child status in class.
- To discover where the child needs help, the nature of the help, his/her areas of strength.
- Data necessary to guide each child’s all round growth and development.

#### **b) Classroom Purposes**

Evaluation should provide data enabling the teacher to determine the effectiveness of teaching. It should help in answering questions such as:

- Which of the objectives have been achieved?
- Are the methods and activities relevant and practicable?
- Is re-teaching necessary?

#### **c) Curriculum Materials**

- Are they relevant, usable, appropriate and affordable?

#### **d) Schools - Wide Purposes**

- Asses the overall effectiveness of the institutional programme.
- Reveal over and under- emphasis in individual classrooms.
- Reveal learning areas needing more attention throughout the school.
- Assist the school administration and staff in planning for institutional improvement.
- Provide data useful for school wide guidance programme.



### e) Community

What are the attitudes and inputs of the community to the curriculum and to the curriculum development process?

Essentially, evaluation ensures that strengths and weaknesses are detected at an early stage thus saving time, resources and frustration and increase the chances of success of a programme.

#### **Types of Evaluation**

As pointed out in the summary, there are various types of evaluation. Let us examine some of them, pre-assessment, formative, summative evaluation and impact evaluation.

*Brief details of each of them follow.*

#### **Pre-assessment**

This is the process that helps to determine whether the students possess the prerequisite knowledge and skills to enable them proceed with new material. This is useful at the beginning of a new course; beginning of a new year in school. It is also useful for a new teacher posted in a class he/she has not handled before.

#### **Formative Evaluation**

Formation evaluation is that which takes place during the implementation of a curriculum project or programme. It therefore guides and promotes the development of the programme, by providing data for its improvement.

**Note:** Formative evaluation should take place at all stages of curriculum development and implementation.

**Summative Evaluation** refers to evaluation carried out at the end of a programme. It facilitates major decisions about whether to continue with the programme as it is; expand it, modify it or stop it all together depending on the extent of success or failure of the programme.

**Impact evaluation** is an aspect of summative evaluation; it establishes the impact of the programme on the beneficiaries or recipients of the programme, and the community in general.

#### **Criteria for Curriculum Evaluation**

There are a variety of proposals in curriculum literature on what constitutes criteria for evaluation. Following is one example. Curriculum evaluation can be judged by: consistency of evaluation with objectives of project; comprehensiveness, validity and reliability, and continuity. Each of those criteria is briefly discussed hereafter.



**Consistency with objectives** i.e. Curriculum evaluation should assess and measure the attainment of the objectives of the curriculum. The various levels of learning objectives need to keep in mind as per blooms taxonomy, i.e. knowledge; comprehension; application; analysis; synthesis; and evaluation.

Also, the various domains need to be kept in mind i.e. cognitive, affective and psychomotor. For example, from a 'civic education curriculum, one affective domain objective could be "Learners should display appropriate attitudes towards national patriotism."

The process of evaluation should look for evidence that such attitudes have been developed e.g. Concept of education for good citizenship is often evaluated in terms of knowledge of the government structure or knowledge of civics. This is inadequate.

Also, practical skills (psychomotor) in Home Science, Agriculture, Biology etc. are often evaluated through checking for knowledge of facts on the topics; not the actual practice. This again is inadequate.

### **Comprehensiveness**

All the objectives of the curriculum should be evaluated. Often only the cognitive domain is tested; through recall of facts. To test for comprehensiveness, one could carry out:

- An evaluation of the broad administrative and general aspects of the education systems with the aim of finding out how good the education system is; how relevant the programme is.
- Evaluation pertaining to course improvement through assessment of instructional methods instructional materials to establish those that are satisfactory and those which are not;
- Evaluation related to individuals learners; to identify their needs and to help one plan better for the learning process.
- Feedback to the teachers, to find out how well they are performing;

Evaluation thus serves as a diagnostic tool for remedial teaching to improve pupils learning.

### **Validity and reliability**

**Validity:** This criterion answers the question "Do the evaluation instruments used e.g. examinations and tests measure the function they are intended to measure?"

**Reliability:** Consistency with respect to time i.e. reliable instruments should give same results when administered at different times.



## Continuity

Evaluation should be a continuous process; an integral part of the curriculum development process and classroom instruction. Hence, provide continuous feedback on weaknesses and strengths; for remedial action to be taken.

Another set of widely shared evaluation criteria that is applicable in any field are:

*Relevance, Efficiency, Effectiveness, Impact and Sustainability*

**Relevance:** This indicates the value of the intervention or programme in relation to other

Stakeholders need, national priorities, international partners' policies, including the millennium development goals, National development plans in the various countries etc.

**Efficiency** – answers the question; “Does the programme use the resources in the most economical manner to achieve its goals.”

**Effectiveness** – Is the activity achieving satisfactory results in relation to stated objectives?

**Impact** – What are the results of the intervention, intended and unintended; positive and negative – including social, economic, environmental effects on individuals, institutions and communities?

**Sustainability** – This addresses the issue: “Are the activities and their impact likely to continue when external support is withdrawn, and will it be more widely replicated and adopted.” For example if a country institutes “Free Primary Education” as is currently the case in Kenya and many other African countries, with heavy donor support, is this likely to continue in the future.

## The Role of Teachers in Curriculum Evaluation

As pointed out earlier, curriculum evaluation refers to the process of collecting data in a systematic manner for the purpose of assessing quality, effectiveness and worth of a programme. For evaluation to be carried out effectively the teacher has to be involved in the process. Teachers should provide data on the progress of students and of materials. Teachers are best placed to judge the quality of materials, the depth to which the topics have been or should be dealt with and the sequencing of the topics. They should be required to document their experiences and those of the learners. Teachers should therefore have *skills for observing and documenting their observations, constructing appropriate tests and examinations, and reporting their findings in a systematic manner*. These skills need to be provided during pre-service or teacher development programmes, which are discussed in Activity VI.



Field officers and educational administrators also have a key role to assist the teachers and to coordinate the teachers' contributions in the area of evaluation. The subject panels that are organized at local levels in some countries can, if properly utilized, be a very effective system of initiating and sustaining teacher participation in this process. Through subject panels many more teachers can be incorporated in curriculum development and evaluation than is possible through the National panels operated at curriculum development institutions in the various countries. A few questions can be discussed on the role of teachers in curriculum development and evaluation. These are:

- i) How effectively are the teachers involved in curriculum evaluation?
- ii) To what extent are teachers providing feedback to the curriculum Coordinators at the national curriculum development institutions?
- iii) Are curriculum coordinators seeking information from the teachers?
- iv) To what extent is the feedback from the teachers incorporated in the curriculum and curricular materials?
- v) Do teachers have adequate skills, time and resources for observing, testing, measuring, gathering other relevant data and documentation?
- vi) How well are teachers prepared for developing curriculum and implementing new curricular?
- vii) How coordinated is the flow of information between teachers, field officers, inspectorate, teacher training institutions and the National Examination Bodies?

Involvement of teachers in curriculum development and evaluation could, in the long-run lead to relevant, cost effective and self –sustaining education programmes.

*You are now ready for an activity to enhance your understanding on the topic of evaluation.*



### Activity

1. Identify and write down 3 other definitions of evaluation from a variety sources and explain briefly the key elements. (about 100 words)
2. From the above text and your own experiences in education, which activities in a school setting would you consider as constituting monitoring process? Write a 100 words response.
3. Analyse and explain in your own words what you see as three main advantages of evaluation to students in schools. (about 100 words)
4. What is the relevance of the teacher education programme you are currently undertaking in relation to the EFA goals in the context of your country's track record of educational achievements? Respond in 250 words using the following Structure.
  - a. EFA goals: Look for these in relevant educational document in your country and list them down.
  - b. Write down the purpose of the AVU teacher education. Look this out from relevant documents.
  - c. Assess the purpose of the AVU teacher education programme in view of each of the EFA goals, as applicable in your country. (200 words)

### Summary

In this unit we described curriculum evaluation as the process of establishing the extent to which the curriculum objectives have been achieved after the teaching and learning process. We emphasized that evaluation is a judgemental process aimed at decision making regarding the curriculum.

Various terms related to evaluation were clarified including assessment, measurements. For example, measurement was described as the determination of the actual educational outcomes in view of the intended outcomes expressed in the objectives. Testing on its part is the use of instruments for measuring achievement. Monitoring and evaluation were distinguished in which monitoring was considered as the continuous review of progress of planned activities; while evaluation is the assessment of overall achievement.

With regard to purpose of evaluation we note that evaluation serves different aspects and participants in the education process. These include feedback to students themselves, classroom purpose including appropriateness of methods, curricular materials and even the community itself.





The various types of evaluation were discussed including formative and summative evaluation where the former takes place during implementation while the latter is at the end of the programme.

Criteria for curriculum evaluation presented included consistency with objectives, comprehensiveness and continuity. Also mentioned were issues of relevance, efficiency, effectiveness and sustainability.

The module emphasized the importance of the role of teachers in curriculum evaluation, since they are in constant touch with the students. They should therefore be equipped with the necessary skills, carrying out meaningful evaluation on a regular basis.

### **Formative Evaluation**

#### **Questions**

- Q1. Give five reasons why curriculum evaluation is undertaken.
- Q2. Distinguish between monitoring and evaluation and their contribution to curriculum development.
- Q3. Discuss four criteria for evaluation and the extent to which they are adhered to in the evaluation of the secondary school curriculum in your country.
- Q4. a) Discuss why it is crucial for teachers to be involved in the curriculum evaluation process.
- b) What are the constraints that would affect teachers' effectiveness in their role as curriculum evaluators?

#### **Possible answers**

- Q1. Evaluation provides feedback to several stakeholders in the education system.
- Learners themselves; individual learners identify their strengths and weakness and lay strategies to improve.
  - Teachers: feedback on success of the teaching/learning process; remedial measures can be put in place.
- Q2. Monitoring – continuous review of progress of planned curriculum activities. More or less “process evaluation”

Evaluation – process of establishing if intended objectives have been attained; often at the end of the programme (summative) but sometimes periodically, during implementation. Monitoring focuses on whether the targeted population is



being reached, assessment of the flow of inputs and outputs; plus their adequacy and relevance. Evaluation checks on the attainment of objectives and provides objective data on various aspects of the curriculum and its effect on targeted beneficiaries.

Continuous information from monitoring helps to identify weaknesses and strengths in the process; e.g. inadequate resources. This could help in modifying objectives if necessary among other changes.

Evaluation data can also improve the curriculum development through decision making whether to modify curriculum- content, methods, proposed teaching and learning materials and even evaluation approaches recommended. Timely decisions ensure the right direction is taken promptly in the development process.

### Q3. Role of teachers is curriculum evaluation

One approach to the answer could be:

First identify the criteria

Secondly, describe how evaluation is carried out in your country, for both formative and summative evaluation.

Thirdly, relate the evaluation process to the attainment of the criteria one at a time. Analyse the efforts to ensure the examination instruments and process help in the adherence to the criteria. For example, in the Kenyan context, formative evaluation is carried out by teacher through continuous assessment including end of term examination and end of year examinations. Summative evaluation is carried out by a national body, the Kenya National Examinations Council.

Evaluation criteria include

Consistency with objectives; Comprehensiveness; Validity; Relevance; and Continuity among others. (*you will select the ones you wish to discuss*)

Taking comprehensiveness for example in the Kenyan context we note that many of the exams often do not cover the entire range of objectives; due to:

- Difficulty in assessing some of the objectives effectively and objectively e.g. the affective domain where value traits such as integrity, patriotism and honesty are tested through written exams. Also psychomotor domain objectives are inadequately tested due to difficulties in logistics. Even for the cognitive domain, only a small portion is usually tested.

However a lot of effort is made to try and ensure quality examinations at least at summative evaluation level through a vigorous process of developing exams, which go through several stages including group moderations etc.



- Many teachers also do not have adequate skills in development/setting of examinations; where many 'pick' exam questions from any source, not focusing on the objectives particularly for continuous assessment. Therefore, to some degree, the tests and exams meet the criteria of comprehensiveness but not fully. There is room for improvement in the Kenyan context.

Q4. a) Teachers involvement with curriculum evaluation

- Teachers are constantly with the learners they know them well.
- They also have continuous opportunities to collect evaluation data through a variety of means including observation, tests and measurements.
- They can easily assess the relevance, quality and adequacy of teaching and learning resources.

The data they get should be shared with the curriculum developers. They can also make amendments on their own and communicate to relevant authorities.

b) **Constraints**

- Inadequate preparation of teaching in evaluation strategies, including construction of good evaluation instruments.
- Inadequate time due to overwork in many countries etc.



## Learning Activity V

### Title of Learning Activity

#### CURRICULUM CHANGE AND INNOVATION

### Summary of the learning activity

At the end of this unit you should be able to:

- Differentiate between change and innovation.
- Describe the curriculum innovation process.
- Explain the criteria for judging the value of curriculum innovation.
- Discuss models of curriculum innovation.

### Summary

As the environment changes and societies portray new needs, so does the curriculum keep changing to address these needs. A change in the society will provoke changes in the school curriculum since the school is a social institution serving the society. In this section we shall examine the meaning of the terms change and innovation; explore the types of change including minor, medium and major changes and discuss agencies of change. We shall also highlight the importance of change and criteria for judging the value of change. Some of the criteria include relative advantage of the change, compatibility (with previous curriculum) and triability of the curriculum. Models of curriculum innovation are also presented.

### Key words

Curriculum Change – A shift in position of a curriculum due to perceived need or unforeseen circumstances.

Curriculum Innovation - Introduction of something new that deviates from the standard practice.

### List of relevant Readings

[http://en.wikibooks.org/wiki/Change\\_Issues\\_in\\_Curriculum\\_and\\_Instruction/The\\_Teacher\\_as\\_Learner\\_and\\_the\\_Learner\\_as\\_Teacher](http://en.wikibooks.org/wiki/Change_Issues_in_Curriculum_and_Instruction/The_Teacher_as_Learner_and_the_Learner_as_Teacher)

**List of relevant resources**

A computer with internet facility to access relevant information; links and copy write free resources  
Multimedia resources

**List of relevant useful links**

[http://en.wikibooks.org/wiki/Social\\_and\\_Cultural\\_Foundations\\_of\\_A2C\\_and\\_why\\_%3F\\_1](http://en.wikibooks.org/wiki/Social_and_Cultural_Foundations_of_A2C_and_why_%3F_1)

**Detailed Description of the Activity**

Read carefully the content in this unit. Tackle the activity provided at the end of the unit.

**Meaning and Types of Change**

Changes occur in the curriculum so that it can adjust to the economic, technological, social, political, and ideological needs in the society. Change can be perceived at three levels.

Minor changes: These involve re-arrangement of subject content, learning activities, re-organization of personnel, addition of topics or methods in the curriculum project.

Medium changes which involves not only organizing of content, materials or facilities, but it involves integration of subjects or new approaches to the existing subjects. On the other hand;

Major change involves an overhaul of the existing curriculum. It may involve complete re-organization of the conceptual design of the curriculum, change in structure, content, methods and approaches. Materials and facilities; leading to a totally new curriculum plan or programme.

For curriculum change to occur, there are certain agencies involved in the process. Let us examine some of them.

**Agencies of curriculum change**

Agencies of change include institutes of Education, Curriculum Development Centres, Research Institutes, Schools, Colleges, Universities, Ministries of Education (all sections and departments), Publishing firms, Examination bodies, Local Education Authorities, Teachers' Unions and the lay public.



### **Importance of Change**

Curriculum change is inevitable in any society. This is because: There is no perfect curriculum for all ages since society keeps on changing; hence, there is need for curriculum to change to meet societal needs. Change links societal needs to school needs in order to bring out dynamic personalities that can address societal needs effectively. Change leads to more effective and efficient use of resources.

### **Curriculum Innovation**

Innovation means the introduction of something new that deviates from the standard practice.

Innovations are systematic and planned for. Innovations in education have specific and defined characteristics. Rogers and Shoemaker (1971) identified basic criteria on the basis of which the value of an innovation can be judged.

### **Criteria for judging the Value of Curriculum Innovation**

Following are five criteria that can be used. These are: relative advantage, compatibility, Triability, Observability, and complexity. Let's examine each of them in turn.

**Relative advantage:** This is the degree to which an innovation is perceived as being better or introducing useful knowledge leading to acceptability and the rate of adoption. An innovation should bring improvement in the learning of students, should be economically manageable, and should have a low initial cost which poses no special risk to anybody's security.

**Compatibility** – refers to the degree to which an innovation is perceived as being in agreement with or supportive of the potential adopters' needs and values.

**Triability** – This refers to the extent to which an innovation can be piloted without taking too much time, energy or funds. The concern is whether sufficient data can be obtained from a limited trial in order to make a decision as to whether the innovation is necessary or not.

**Observability** - Means that the potential adopters and sponsors of an innovation would like to see tangible results. The immediate consequences of the innovation should be clearly defined.

**Complexity** – An innovation must be simple enough to be understood and utilized. If the potential adopters perceive it as being too complicated in terms of time, money and expertise, they may avoid it or reject it.

An innovation must fit in with the goals and objectives of education which usually reflect the needs, interests, values and problems of the society. An innovation must be appropriate, economical in terms of time, space and resources;



aligned with the philosophy of the society and the school, and rooted in sound educational theory.

### **What then is involved in curriculum innovation?**

**Curriculum Innovation Process** involves the following stages:

- (a) **Initial disturbance:** This is the pressure exerted to a system either from within or without. This disturbance constitutes the problem to be dealt with.
- (b) Feeling of need and decision to act on it;
- (c) Diagnosis of problem;
- (d) Search for solution to the problem
- (e) Application of possible solution to solve the problem
- (f) Evaluation of the strategies applied to see whether it will successfully solve the problem

### **Models of Curriculum Innovation**

Various scholars have proposed different models of innovation. For instance, Ronald Havelock (1969) identified three main models of innovation as follows:

- The Research, Development and Diffusion Model (R, D and D)
- The Social Interaction Model (SI)

The Problem – Solving Method (P – S)



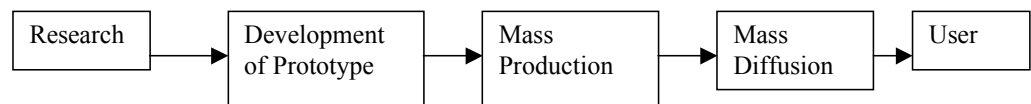
We shall now briefly examine each of these models.

### **The Research, Development and Diffusion Model**

In this model an idea or practice is conceived at the central planning unit and then fed into the system. RD & D is effective where curriculum development is done on a large scale and ideas have to reach wide geographical areas and isolated users. It is a highly organized, rational approach to innovation. Following is a logical sequence of activities in using the RD & D model.

- Basic research by a central project team which develops a new curriculum, devises and designs prototype materials.
- Field trials of the prototype materials and redesign them where necessary
- Mass production of the modified prototype materials
- Mass dissemination or diffusion of the innovation through courses, conferences, and workshops.
- Implementation of the innovation by the users (school, teachers and pupils)

The model can be summarized as follows:-



This model is used in countries which have centralized systems of education under Ministries of Education. Many African countries fall under this category.

### **The Social Interaction Model (Periphery to Periphery Model)**

This model operates through social interaction and emphasizes diffusion of messages from person to person. It stresses the importance of interpersonal networks of information, of opinion leadership, personal contacts and social integration.

The strategy takes the form of convincing administrators and teachers of the usefulness of a new device or practice and enabling them to see for themselves the new practitioner using the innovation. Individuals involved are the ones to implement the innovations. The process involves individuals rather than groups and organizations. It is unplanned and informal hence slow in development. This unplanned process can be made more systematic by structuring and coor-





minating the contacts between groups and individuals interested in curriculum development.

This can be done through courses, conferences, visitations. In social interaction model, the central agency acts merely as a coordinator or communicator of ideas rather than being the generator of ideas. Ideas are generated at the periphery and communicated via the centre to other points on the periphery.

### **The Problem Solving Model (Periphery – centre approach)**

This model is based on the assumption that an innovation is part of a problem-solving process.

The following steps are characteristic of the problem solving model:

- A need is identified
- Need is translated into a problem which is then diagnosed
- Diagnosis leads to search for solutions
- Possible solutions are evaluated – the innovation which provides the best solution is then tested for its effectiveness
- Implementation of innovation.

*Source: Bishop (1985) p. 182*

The problem – solving method is referred to as a periphery – centre approach to innovation. The innovations are initiated, generated and applied by the teachers and schools on the basis of their needs. Such innovation has strong user commitment and the best chance for long term survival.

In this model the receiver is actively involved in finding an innovation to solve his/her own unique problem. This model is flexible enough to encompass all types of innovations, including materials, methods, and groupings of learners.

Thus the problem – solving model is local in nature, usually limited in size, and may not be of high quality compared with more centralized approaches to curriculum development.



## Activity

Using the information you have read above;

1. Identify 2 curriculum development documents in your country, which explain how curriculum is developed.
2. Describe the curriculum development process from analysing the documents highlighting what changes in society may have necessitated the development of the “new” curriculum. Start by indicating the full references of the documents. (Use 150 words).
3. a) Read the article in Appendix XIII “Change issues in curriculum and instruction The teacher as learner and learner as teacher.  
b) Write down three most important lessons that you have learnt from the article which you can try to apply in your career. (100 words for each lesson)  
Lesson 1  
Lesson 2  
Lesson 3

## Summary

### Curriculum change and innovation

This unit has highlighted the place of curriculum change given that societies keep on changing and new needs and issues emerge. Curriculum therefore changes in response to economic, social and political changes.

Types of change discussed included minor, medium and major changes, the latter one involving major overhaul of the existing curricular. Curricular innovation on the other hand is the introduction of something new in the curricular that deviates from the standard practice. To judge the worth/value of an innovation, several criteria are used including relative advantage, compatibility and triability.

Models to guide the innovation process include Research, Development and Diffusion model and Social Interaction model.

### Formative Evaluation

### Questions

- 1 a) What do you understand by the term “curriculum innovation?”  
b) Describe any two examples of curriculum innovations either from your country or anywhere else in the world.



2. a) Explain the extent to which the Research Development and Diffusion (RD&D) model may have been used in your country. If you are not familiar with the process, discuss with an experienced teacher or education official in your locality (200 words)
- b) Write 2 advantages of using the model, using practical examples from your country. (50 words for each advantage.)
- c) What are the constraints in use of the model?

### Answers

Q1. a) Curriculum innovation is the introduction of something new that deviates from the standard practice.

b) Examples of innovations eg.

i) Non-graded schools (NGS)

This is an innovation where instead of having pupils promoted from one grade to another at the end of the year as is the usual traditions they are assigned to a learning group depending on their ability. They move to the next level at their own pace. NGS first implemented in 1959 in the US and Britain. It is practiced in a small way in developing countries but with caution.

ii) Modular flexible scheduling. A procedure for organizing a school day. So that instead of a fixed school day from say 8 am – 4 pm, schedules are prepared according to the needs of learners. For example in Kenya, there are regions that get very hot sometimes. In such areas, the schedules are organized to start very early, say 7 am and finish at midday.

In other areas religions demand necessitate change to accommodate time for prayers, e.g. 12noon- 2pm in many Islamic dominated areas.

Q2. Research Development and Diffusion model.

This is a centralized approach that starts with research on an issue. E.g. HIV/AIDS. The researcher would establish the extent of the problem, the type of curriculum most appropriate, methodology of delivery and evaluation. A package is then developed (prototype); which is then tried in selected schools to redesigned as necessary. Mass production of materials is done followed by diffusion. The program is therefore used by all schools. Cite specific examples from your country



b) Advantages of the model for example

- Use of research provides reliable data for curriculum development
- The tryout stage ensures that problems can be detected early and modification.

c) Constraint in the use of the model. e.g.

- Inadequate finances for carrying out research are often limited in many developing countries especially in Africa.
- Mass dissemination, though profitable may also be constrained by inadequate resources, both human and financial.



## Learning Activity VI

### Title of Learning Activity

#### THE TEACHER AND THE CURRICULUM

*Once a curriculum is developed, it is expected that various personnel will be involved in ensuring that the curriculum package reaches the expected consumers, the learners. The most important of the personnel for successful curriculum implementation is the teacher who is responsible for organizing the learning experiences and managing the learning environment for the benefit of the learners. This is why this unit on the teacher and the community is included in this module.*

### Summary of learning activity

By the end of the unit you should be able to:

- Define the term teacher and teacher education
- Identify important qualities of a good teacher
- Discuss the extent to which teaching approaches the ideal profession
- Identify the roles and responsibilities of a teacher
- Identify teacher preparation programmes in your country
- Discuss approaches to teacher education

### Summary

Teachers are expected to be curriculum developers, implementers and evaluators. Teacher Education (TE) prepares the student teacher to carry out these roles effectively to ensure successful teaching – learning process. TE facilitates in acquisition of the desired teacher characteristics. Approaches to teacher education include Pre-service (before joining the profession) and in-service (teacher development).

Organisation of the TE programs can either be concurrent (academic and professional components taught simultaneously) or consecutive, where professional training follows academic qualifications.

The rights and responsibilities of teachers need to be well understood by all student teachers.

**Key words**

Teacher - Any person who is responsible for the education of pupils

Teaching - Giving instruction to somebody

Teacher Education - a process by which an individual gains knowledge or insight or develops skills and attitudes that would enable him/her to perform the art of teaching effectively.

**List of REQUIRED readings**

[http://en.wikipedia.org/wiki/Teacher\\_education](http://en.wikipedia.org/wiki/Teacher_education)

[http://portal.unesco.org/education/en/ev.php-URL\\_ID=6138&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/education/en/ev.php-URL_ID=6138&URL_DO=DO_TOPIC&URL_SECTION=201.html)

**List of relevant resources**

Computer

Multimedia resources

**List of relevant useful links**

[http://portal.unesco.org/education/en/ev.php-URL\\_ID=6139&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/education/en/ev.php-URL_ID=6139&URL_DO=DO_TOPIC&URL_SECTION=201.html)

[http://portal.unesco.org/education/en/ev.php-URL\\_ID=6135&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/education/en/ev.php-URL_ID=6135&URL_DO=DO_TOPIC&URL_SECTION=201.html)

**Detailed Description of the Activity**

Read through the information provided in this unit. Then respond to the activities at the end of the unit.



### **Why include Teacher Education in this Curriculum Studies Module?**

This is because teachers are expected to be curriculum developers, curriculum implementers and curriculum evaluators. Teacher's values, attitudes, skills, knowledge, experience, special strengths, weaknesses have a bearing on curriculum for other stakeholders. Hence, the need to focus on teacher education in this module.

We begin by examining the terms teacher, teaching and teacher education.

#### **Who is a teacher?**

Generally speaking, the term teacher covers all those persons in schools who are responsible for the education of pupils. Teachers facilitate students learning.

#### **What is teaching?**

As mentioned above, simply put, teaching is giving instruction to somebody. Thus teaching is the process of providing information, knowledge and skills to others.

Teaching can also be described as a "professional human activity in which one creatively and imaginatively uses himself/herself and his or her knowledge to promote the learning and welfare of others.

#### **What is Teacher Education?**

Teacher Education can be regarded as policies and procedures designed to equip teachers with the knowledge, attitudes, behaviours and skills they require to perform their tasks effectively in the school and classroom.

Teacher education can also be considered to be, "such institutionalized educational procedures that are aimed at the purposeful, organized preparation or further education of teachers who are engaged directly or indirectly in educational activity in their life work. (Yates, 1972)

#### **Qualities of a good Teacher**

The purpose of training is to equip the teacher with the appropriate qualities that will enable him/her to facilitate the teaching learning process effectively. A good teacher requires the following qualities among others:

- Appropriate and adequate knowledge in his/her area of specialization. In other words, he/she has a special interest i.e. expertise in a specific field.
- Appropriate attitudes to the job and wanting to learn on the job. Thus, he/she remains a student all his life
- Capacity to learn by experience.



- Good conduct of his/her personal life i.e be of good character. He/she can therefore be a role model for his/her students
- The good teacher will be adaptable, i.e. will be able to handle any circumstances or crisis in life and in school

Considering the above characteristics, “to what extent do you think Teacher education training institutions can produce fully trained teachers at the end of the course?” (Ponder this before continuing reading).

It is generally agreed that many of those characteristics can only be acquired and perfected while the teacher is on the job. Hence, teacher education institutions can only lay a foundation in which the (young) teacher will build on. It is also generally agreed that teacher training is fairly complete within the next five to ten years after graduation; this training is through the effort of the teacher himself/herself though induction by more experienced teachers in the school set - up.

**Let us now examine various approaches to teacher education.**

### **Approaches to Teacher Education**

It is important to realize that the nature of education and training in schools and colleges has, over the years, undergone changes that could be referred to as *metamorphosis*. Since the time of earlier educationists such as Dewey and Herbert and others, major changes have taken place such as:

- Education and training have moved away from the traditional approach, where the teacher instructed and disciplined his pupils; to modern approaches which have incorporated knowledge from the field of psychology.
- Reforms in teaching methods have also been affected by the spread of free, compulsory and universal education (at least in the basic cycle); mainly in the western world; and several developing ones are coming up on similar policies. Expansion in enrolment was not matched with supply of teachers. This resulted in:
  - Increased workload for teachers.
  - Adjustment in teacher training programmes and approaches at college and other training institutes.
- Knowledge explosion in Technology and the scientific field made it necessary to adjust teacher education e.g. in the past, intake after primary level was done for training of primary school teachers. But it became necessary over time to recognize the need to recruit at higher levels.





In this respect, there are several **approaches to teacher education** including

- Pre-service, also referred to as Initial Teacher Education, before joining the teaching profession
- In-service – Teacher Development or continuing professional development

Another categorization of approaches consists of:

- Concurrent programmes of teacher education.
- Consecutive programmes of teacher education.

This categorization is based on time of training in relation to a teacher's entry into the profession. Before we discuss the individual approaches in detail, we shall first examine the curriculum for teacher education.

### **Curriculum for Teacher Education**

Colleges and institutes of education are in origin and intention, vocational institutions. The colleges are also concerned, as institutions of higher education with the personal education of students beyond the school level. The curriculum consists of three components:

#### **i) Subject / content Area**

This is what enables a trainee teacher to advance in his/her area of specialization. For secondary school training, student teachers generally take one, two or three subjects, for example Maths and Physics.

At the primary teacher training level, student teachers take most of the subjects taught at the school level, with very little specialization in many African countries. This is because they are expected to teach most or all subjects in their classes at primary school.

#### **ii) Professional preparation component**

This area could include the following:

- Principles and methodology of teaching at either primary or secondary level.

These are handled under communications and technology department (s).

- Foundation courses such as history of education, philosophy and sociology of education among others.
- Psychology courses including general psychology, child psychology, tests and measurements among others.
- Curriculum studies as well as elements of educational administration and planning, and also economics of education.



**NB.** Different institutions have their own curricula depending on their circumstances and choice by faculties.

### **iii) Teaching Practice**

‘Field experience’ or practical teaching, is the aspect of teacher education programmes most directly and specifically linked to existing school practice as a model.

In the usual programme, a student is ‘apprenticed’ to a school under the guidance of a practicing subject teacher for periods ranging from one month to three months. He is then observed at intervals by supervisors from the training institution where he/she is enrolled. At the end of the teaching practice, evaluations are submitted by both the regular subject teacher and the college/university supervisor as part of his/her record for final grading and certification. Often there is an external supervisor to moderate the grades given by the regular teacher and the college/university supervisors.

Teaching practice is useful as it gives the student opportunity to familiarize himself with conditions under which he will work as a trained professional.

The teaching practice component is handled differently in various training institutions.

The differences occur with regard to:

- Timing of the training, i.e. at what stage in the programme do they begin the TP
- Duration of the TP period
- Number of teaching practice sessions
- Level of involvement of cooperating teachers.

Let us now examine each of the modes of training highlighted above in some detail.

### **Pre-service Teacher Education**

Pre - service teacher education is generally a fully institutionalized scheme of training in which participant teacher trainees attend an institution on full time basis before the teacher commences the teaching profession. The curriculum that consists of the three main elements highlighted above:-

- i) Subject / Content area
- ii) Professional preparation
- iii) Practice teaching.



### **In -service Education for Teachers (Teacher Development)**

In - service education unlike pre-service education may take place at any time either as full time or as part time study, during the potentially continuous professional life of a teacher. In –service education may consist of a carefully planned, sustained work over a lengthy period leading to further qualification in the form of advanced certificate, diploma or higher degree. It may equally be casual study, pursued irregularly in the evenings or during school vacations without leading to measurable recognition for purposes of salary or promotion.

In this latter case in-service education helps acquaint the practicing teacher with the latest innovations in the curriculum of his subject area. In this way, the teacher is most able to cope with new demands in his area of specialization as well as new approaches and methodology intended to enhance teaching and learning.

In service is justified because of explosion of knowledge and the need to have teachers keep abreast of new developments in knowledge – no teacher can claim to be fully equipped in knowledge sufficient to last him his teaching career.

### **Concurrent Programmes of Teacher Education**

Concurrent programmes present both professional courses and subject/content over the same period of study for an undergraduate degree or diploma. The curriculum for the programme is generally the same as that described above. That is:

- Professional development courses (in the field of education)
- Main subject study: One, two, or three main subjects may be studied at various levels.

Although these may be the subjects that students are going to teach at secondary level, the main purpose of the studies is to further the education of students.

- Practice teaching.

### **Criticism**

Concurrent programmes of teacher education have been criticized for not sufficiently preparing the students in either the professional or the academic aspect as it tends to cram too much work into a short space of time denying the trainee teacher sufficient grounding in either area. The programme however, has the following advantages.

### **Advantages**

- It helps the student teacher get used to a school situation gradually due to the in built internship (i.e. teaching practice)
- It provides adequate adjustment to the professional requirements of the teaching career before the teacher is certificated.



### **Consecutive Programme of Teacher Education**

This programme is used to convert an essentially general – based graduate into a professional teacher by the addition of roughly one year of further professional study. For example, the Postgraduate Diploma in Education (PGDE). This programme has a number of **advantages** such as:

- It enables student teachers to take all their courses in the education faculty so they can engage in practice teaching without interrupting their academic work.
- It gives a “second” chance to people who may not have initially thought of teaching as a profession.
- It can also be justified where there is acute shortage of teachers and a need is felt to introduce a ‘crash’ programme of training to meet the deficit in teacher personnel.

The programme is, however criticized for:-

- Opening doors to those who can be described as rejects and second rate personnel who may not have an aptitude for teaching as a profession, which may in fact lower the quality of personnel and hence the status of the profession. (This is a controversial point of debate).
- Taking too short a duration to prepare the teachers; hence it may be unfair to expect such graduates can function with any degree of competence in their initial years of teaching.

Now deal with the following activity that will give an opportunity for further reading and comprehension of the topic or teachers education programmes.



### Activity

Read the article on “Teacher Education”. Appendix IX. Using that information and the text in this unit,

- a) Identify the teacher education programmes in your country.  
You can do this by discussing with an education official to enumerate the programmes, and the specific institutions involved. List them down.
- b) What do you consider as the strengths and weaknesses of any two of the programmes.

Use the following format:

#### **Programme I**

Strengths Justification (50 words in each case)

1.

2.

Weaknesses Justification (50 words in each case)

1.

2.

#### **Programme II**

Strengths Justification (50 words in each case)

1.

2.

Weaknesses Justification (50 words in each case)

1.

2.

Let us now examine the extent to which teaching can be considered to be a profession.

### **Is teaching a profession?**

To answer this question, we need to examine what constitutes an ideal profession. An ideal profession has certain characteristics that distinguish it from others. Let's now explore some of them.

### **Characteristics of an ideal profession**

These include “Expertise” and ‘Commitment’, among others.

Let's discuss a few.



### **Expertise**

This characteristic suggests that the profession:

- Is based on well developed substantive theory of specialized body of knowledge.
- Has highly specialized and valued skills acquired through education, training and socialization.
- Has opportunities for continuous development through continuing education and research.

### **Commitment**

This means that:

- Motivation is by vocational calling to provide service to clients, society and mankind.
- Payment is by fees or salaries in relation to services rendered.
- Terms and conditions of service contribute to the level of commitment.

Other factors contributing to professionalism include: Professional decisions and judgments being based only on expertise. The professionals themselves have control list over recruitment, training, certification and standards of practice.

Knowledge of Code of Ethics to govern and regulate membership and professional practice.

### **Rights and Responsibilities of teachers**

A teacher requires to be familiar with his/her rights and responsibilities for effective teaching.

You will explore these through the article provided and answering questions below.

### **Activity**

1. Read the article on “The Rights and responsibilities of teachers in Appendix X
2. List and summarize five rights of teachers.
3. List and summarize five responsibilities of teachers.
4. Select four of the rights listed in the article and discuss the extent to which those rights are applicable in your country for secondary school teachers. In your discussion, highlight the factors that affect attainment of those rights and propose possible solutions. (300 words).



A good teacher therefore is expected to have expertise in his/her area of specialization. He/she should also have a high degree of commitment to ensure every child benefits from the curriculum.

To summarize this section on teaching as a profession, we point out that the characteristics of an ideal profession; it is no ideal profession really exists. Most of them are in the state of “professionalism” which is the development process through with various occupant and their members seek to move towards the ideal profession.

The status of professionalization in teaching varies from country to country. In some developing countries the status is relatively low for a variety of reasons including:

- Many untrained teachers in the profession.
- Large size of low status teachers with limited education and training.
- Lack of definite professional associations.
- High vulnerability and to scrutiny and criticism by various segments society.

To what extent do you think teaching approaches the ideal professional status in your country? Ponder this question before you continue reading on.

Let us examine the rights and responsibility of the teaching profession. Teaching as a profession also has various rights and responsibilities. A teacher requires to familiar with his/her responsibilities be for effective teaching and hence implementation of the curriculum.

### **Summary**

In this unit, we pointed out that the teacher is the most important implementer of the curriculum. We also noted that teacher education can be regarded as policies and procedures designed to equip teacher with knowledge, attitudes, behaviour and skills they require to perform their tasks effectively in the school and classroom.

Qualities of a good teacher, which you will be expected to develop during your training include appropriate and adequate knowledge in the subject area, good character among others.

Approaches to teacher education were highlighted including: pre-service, i.e. initial teacher education before joining the profession, and in-service teacher education, which is equivalent to teacher development as the teacher while the teacher continues with his/her profession.



Curriculum for teacher education include subject/content area, professional preparation include methodology of teaching and teaching practice. A question was raised as to whether teaching is a profession. The question was discussed in relation to characteristics of an ideal profession including expertise, and committed. Noting that there is really no ideal profession and that most professions grow towards the ideal status, teaching too is considered a profession. The level of professionalism is different in various countries of the world where the status varies depending on the importance attached to it by the society and establishments.

### **Formative Evaluation**

1. Discuss the statement, “teachers are born not made”. In your discussion,
  - a) State your stand on the issue and justify. (100 words)
  - b) suggest how the teacher education programme can be used to develop appropriate characteristics of a good teacher (150 words)
2. Discuss four issues that you think affect the teaching profession in your country

Issue	Explanation (100 words / issue)
1.	
2.	
3.	
4.	

### **Possible answers**

Q1. Teacher are born and not made (you are free to take any stand as long as you justify it.

For example:

- If you agree with the statement, you will emphasize the in-born characteristics of the individual depending on their personality. For instance, teachers need to be able to communicate effectively. If one has any outgoing personality, they would have an advantage over say introverts.
- If you disagree with the statement, you would be emphasizing the role of teacher education programmes in developing the teachers.





Characteristics such as “expertise” can be developed through the subject content taught. Secondly, skills like communication can be developed through teaching and also during practicum.

Your need to expound each of the points you raise in relation to the curriculum for teacher education.

Q2. Issues affecting teaching profession some of the issues you could raise include:

- Inadequate training due to limited opportunities in some countries.
- Too many untrained teachers in the teaching force.
- Poor terms and conditions of service etc.

*(Discuss each point adequately with practical examples from your country)*



## XIV. Appendices

### Appendix I

#### Curriculum

From Wikipedia, the free encyclopedia

In formal education, a curriculum (plural **curricula**) is the set of courses, and their content, offered at a school or university. As an idea, **curriculum** stems from the Latin word for race course, referring to the course of deeds and experiences through which children grow and mature in becoming adults.

#### Historical conception

In *The Curriculum*, the first textbook published on the subject, in 1918, John Franklin Bobbitt said that curriculum, as an idea, has its roots in the Latin word for *race-course*, explaining the curriculum as the course of deeds and experiences through which children become the adults they should be, *for success in adult* society. Furthermore, the curriculum encompasses the entire scope of formative deed and experience occurring in and out of school, and not experiences occurring in school; experiences that are unplanned and undirected, and experiences intentionally directed for the purposeful formation of adult members of society.

#### Curriculum in formal schooling

In formal education or schooling (cf. education), a **curriculum** is the set of courses, course work, and content offered at a school or university. A curriculum may be partly or entirely determined by an external, authoritative body (i.e. the National Curriculum for England in English schools).

In the U.S., each state, with the individual school districts, establishes the curricula taught. Each state, however, builds its curriculum with great participation of national academic subject groups selected by the United States Department of Education, e.g. National Council of Teachers of Mathematics (NCTM) for mathematical instruction. In Australia each state's Education

Department establishes curricula. UNESCO's International Bureau of Education primary mission is studying curricula and their implementation worldwide.

*Curriculum* means two things: (i) the range of courses from which students



choose what subject matters to study, and (ii) a specific learning programme. In the latter case, the curriculum collectively describes the teaching, learning, and assessment materials available for a given course of study. Currently, a *spiral curriculum* (or *tycoil curriculum*) is promoted as allowing students to revisit a subject matter's content at the different levels of development of the subject matter being studied.

The constructivist approach, of the *tycoil curriculum*, proposes that children learn best via active engagement with the educational environment, i.e. discovery learning.

Crucial to the curriculum is the definition of the course objectives that usually are expressed as *learning outcomes* and normally include the programme's **assessment strategy**. These outcomes and assessments are grouped as **units** (or modules), and, therefore, the curriculum comprises a collection of such units, each, in turn, comprising a specialised, specific part of the curriculum.

So, a typical curriculum includes communications, numeracy, information technology, and social skills units, with specific, specialized teaching of each.

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## Appendix II

### Aims, Goals, Objectives

#### Focus:

The AGO is a strategy to get students to focus directly and deliberately on the intention behind actions. Being able to define objectives helps the student's thinking in such areas as decision making and planning.

**Aim** is the general direction

**Goal** is an ultimate destination

**Objective** is a recognizable point of achievement along the way

#### Objectives: AGO = Aims, Goals, Objectives

You can do something out of habit, because everyone else is doing it, or as a reaction to a situation. There are also times when you do something "in order to" achieve some purpose or objective. It can help your thinking if you know exactly what you are trying to achieve. It can also help you to understand other people are thinking if you can see their objectives.

#### Principles:

- If you know exactly what your objectives are, it is easier to achieve them.
- In the same situation, different people may have different objectives.
- On the way to a final objective, there may be a chain of smaller objectives, each one following from the previous one.
- Objectives should be near enough, real enough and possible enough for a person to really try to reach them.

There may be many objectives but some are more important than others.

[http://www.mordialloccluster.vic.edu.au/documents/datt\\_tools/ago.doc](http://www.mordialloccluster.vic.edu.au/documents/datt_tools/ago.doc)



## Appendix III

### Bloom's Taxonomy of Educational Objectives

#### Benjamin Bloom's Taxonomy of Learning Domains - Cognitive, Affective, Psychomotor

##### Domains - design and evaluation toolkit for training and learning

Bloom's Taxonomy, (in full: 'Bloom's Taxonomy of Learning Domains', or strictly speaking:

Bloom's 'Taxonomy Of Educational Objectives') was initially (the first part) published in 1956 under the leadership of American academic and educational expert Dr Benjamin S Bloom. 'Bloom's Taxonomy' was originally created in and for an academic context, (the development commencing in 1948), when Benjamin Bloom chaired a committee of educational psychologists, based in American education, whose aim was to develop a system of categories of learning behaviour to assist in the design and assessment of educational learning.

##### Explanation of bloom's taxonomy

First, don't be put off by the language or the apparent complexity of Bloom's Taxonomy -at this basic level it's a relatively simple and logical model.

**Taxonomy** means 'a set of classification principles', or '**structure**', and **Domain** simply means

'**category**'.

Bloom's Taxonomy underpins the classical '**Knowledge, Attitude, Skills**' structure of learning method and evaluation, Bloom's Taxonomy of Learning Domains remains the most widely used system of its kind in education particularly, and also industry and corporate training. It's easy to see why, because it is such a simple, clear and effective model, both for explanation and application of learning objectives, teaching and training methods, and measurement of learning outcomes. Bloom's Taxonomy provides an excellent structure for planning, designing, assessing and evaluating training and learning effectiveness. The model also serves as a sort of **checklist**, by which you can ensure that training is planned to deliver all the necessary development for students, trainees or learners, and a template by which you can assess the validity and coverage of any existing training, be it a course, a curriculum, or an entire training and development programme for a large organisation.



### **Bloom's taxonomy definitions**

Bloom's Taxonomy model is in three parts, or 'overlapping domains'.

1. **Cognitive domain** (intellectual capability, ie., **knowledge**, or '**think**')
2. **Affective domain** (feelings, emotions and behaviour, ie., **attitude**, or '**feel**')
3. **Psychomotor domain** (manual and physical skills, ie., **skills**, or '**do**')

In each of the three domains Bloom's Taxonomy is based on the premise that the categories are ordered in degree of difficulty. **An important premise of Bloom's Taxonomy is that each**

**category (or 'level') must be mastered before progressing to the next.** As such the categories within each domain are levels of learning development, and these levels increase in difficulty.

The learner should benefit from development of knowledge and intellect (Cognitive Domain); attitude and beliefs (Affective Domain); and the ability to put physical and bodily skills into effect - to act (Psychomotor Domain).

### **Bloom's taxonomy overview**

Here's a really simple adapted 'at-a-glance' representation of Bloom's Taxonomy. This simple overview can help you (and others) to understand and explain the taxonomy. This overview helps to clarify and distinguish the levels.

For the more precise original Bloom Taxonomy terminology and definitions see the more detailed domain structures beneath this at-a-glance model. It's helpful at this point to consider also the 'conscious competence' learning stages model, which provides a useful perspective for all three domains, and the concept of developing competence by stages in sequence.

### **Cognitive Affective Psychomotor**

#### **Knowledge Attitude Skills**

1. Recall data 1. Receive (awareness) 1. Imitation (copy)
2. Comprehend/Understand 2. Respond (react) 2. Manipulation (follow instructions)
3. Apply (use)
3. Value (understand and act) 3. Develop Precision
4. Analyse (structure/elements)
4. Organise personal value system
4. Articulation (combine, integrate related skills)



5. Synthesize (create/build)
5. Naturalization (automate, become expert)
6. Evaluate (assess, judge in relational terms)
5. Internalize value system (adopt behaviour)

<http://www.businessballs.com/bloomstaxonomyoflearningdomains.htm>



## **Appendix: IV**

### **Curriculum Design Model and The Enlightenment**

**Wang Xia**

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Curriculum development is a complicated systematic engineering that begins from curriculum design. Curriculum design is the fundamental part of curriculum research. We not only should understand the question of curriculum design under macroscopic background, but also should understand the particular model of curriculum design, so as to draw on experience and make use of it properly into practice.

#### **Curriculum Design and the Model**

Curriculum design aims to plan and manage the substantive framework, the paradigm and the organizational form of curriculum. In general it is usually influenced by decisions made in two levels. One is in a broad sense. That is the choice of the basic value. Curriculum design is often influenced by designers' attitude towards the basis of choosing materials. In history curriculum decisions were made under the basis of three factors. They were organized disciplines, learning students and society. The other is in a practical sense. It includes the management and implementation of curriculum components. The problems it deals with focus on what subjects to design in accordance with goals and objects, and how to offer them. It should take account of the requirement and need of society, knowledge and individuality. Curriculum design model is a set of ways to arrange curriculum. A particular model of curriculum design always embraces designers' understanding of curriculum planning. And it decides the programme of implementation as well. To practice a particular model is in fact to make use of a set of proper programmes and ways to arrange and manage the subjects or disciplines under the guidance of designers' concepts of planning. What curriculum design model to choose depends on people's concept of curriculum and their understanding to planning. Different people may have different ideas of curriculum model.





## Some Typical Curriculum Design Models

### 1. *Discipline-Centered Design*

This design pays more attention to knowledge system. It divides curriculum into “subjects” and “disciplines”. They are arranged logically, so as to be learned and remembered by students more conveniently. Why should the system of knowledge be emphasized? Because it is thought to be very important in the progress of civilizations to learn disciplines with organized systems of knowledge. And it is an important character for the educated to grasp such systems of knowledge.

Subject Design is one of the paradigms of Discipline-Centered Design. It argues to organize the curriculum into lots of subjects. Each subject purposely sets forth its special qualified knowledge system.

Another paradigm is Discipline Design. It also depends on the inner plan of contents. The difference between Subject Design and Discipline Design is that the latter only takes knowledge as discipline. Discipline Design is an effective organization to preserve the wholeness of human intellect. It provides students with materials in a reasonable way. What it provides is not mere facts and theories to be remembered, but concepts, relations and reasoning processes originated from students’ own activities and thinkings. The third paradigm is Broad Fields Design. It tries to integrate two or more subjects into a single and broad discipline. It aims at overcoming the disadvantages of “fragmented curriculum” and “framed curriculum”.

### 2. *Learner-Centered Design*

Instead of giving instructions with the arranged curriculum unit, Learner-Centered Design emphasizes individual development, cares about students’ needs, students’ interests and purposes, plans teaching according to the interests of students themselves. The designers believe that the direct interests students have in curriculum are key facts for successful learning. They are effective basis of curriculum. The designers don’t agree with the opinion that the best way to train the intellect of students is to learn the structure and contents of a subject, to regard knowledge as ways of problem solving and technology obtaining. For the above-mentioned principles, there are three paradigms of Learner-Centered Design. The first one is Activity-Experience Design. The framework of curriculum depends on learners’ needs and interests. When to design, designers must know what interests students have and help them to decide the more important interests in learning. The design focuses on the process of problem solving, the cooperation between teachers and students, the learning activities themselves, and skills in solving problems.

The second one is Opening-Classroom Design. It is students who decide what to learn and how to learn. In curriculum project, scopes and sequences are largely



ignored, students form groups by themselves and take part in activities suited to their requirements. The time of activities is not restricted. The process of activities does not have formed structure. The room of activities is not limited, either.

The third one is Humanism Design. It aims at the fully development of human's capabilities. Besides the pure development of intellect, it cares about the development of sentiments, attitudes, ideals, values and the awareness of self-respect.

### *3. Problem-Centered Design*

Problem-Centered Design stresses the importance of the survival of human and society. It thinks highly of both the learning content and the development of the learner. In one way, the level organization of curriculum should be based on the scope and classification of learning fields. The sequence is decided by the problem classifications as well. In another, the needs, the competence of students should also be taken into consideration.

Problem-Centered Design has two paradigms. One is Living-Field Design. The other is Core Design. The former design bases on the human common activities originated from social life. The curriculum content is organized around living fields. The latter pays more attention to set out an agreed research core. All the other disciplines just have relevance to it and try to obey. What is "core"? It is the general necessary components to provide students with common discipline and general education.

## **Reflections on the Innovation of Curriculum Design----People's Republic of China**

Since 1990s, we've made progress in curriculum reforms and we've made research into the problem of curriculum design. But when comes to the decisions of curriculum design, the orientation of value, the essence of curriculum development, there still remains problems. So it is necessary to analyze and research in deep the already made achievements in curriculum research and improve the thinking and ways in reforming our curriculum design.

### *1. Understanding Problems and Necessities*

There are some disadvantages in the present curriculum design. First, the curriculum design model is outdated and simplistic. The whole country adopts one same design, one same plan making no distinction between the rich area and the poor area, the advanced level and the backward level. The same unified model seems to produce students the way to produce industrial products. It strengthens the difference among social classes. Second, curriculum design is mainly subject-centered. In the framework of curriculum, most of the subjects are theoretical ones or knowledge-centered ones. There are few compulsory subjects and technical



subjects. Technique is narrowly explained as the ability to solve a mathematical, etc. problems and do experiments. Such design neglects the students' self realization. The creativity of students is excluded out of the educational level. Third, the only goal of the curriculum design is to help students to enter higher schools. The organization of curriculum loses contact with industrial production, with social reality, with the unbalanced development of districts, with the present trends of international education innovation. Fourth, the method of evaluation is simplistic.

Examination is usually the only means. Students seldom have rights to participate in the process of assessment.

## *2. Innovation of Curriculum Design*

The above mentioned curriculum design models individually focus on knowledge, students and society. Different models have different advantages and disadvantages. To innovate our curriculum design, we need to take all sides into account.

In orientation of curriculum design, we must abandon one-side view when choosing values. It's important to give consideration to value subject and value object, outer value and inner value. The value object---culture, science and technology ---should be chosen and decided by the needs of value subject ( individual and society ). The curriculum design model should be versatile and adaptable. We have large numbers of districts, schools and students. Every one of them differs from one another. Some districts are rich and some are poor. Schools in cities have good equipment. Schools in countryside don't have enough teachers and teaching instruments. Students are not standardized products. They have their own thoughts, interests, personalities and ways of learning. So to provide different curriculum design models is quite necessary. To innovate the curriculum design, the thought of quality education should become the spirit of planning curriculum. The aim of compulsory education is to make the students develop in all round way---morally, intellectually and physically. By learning scientifically designed curriculum , students should learn to do, learn to play and learn to be. It's not the only goal of education to help students successfully enter higher schools.

Who should take part in the design of curriculum? Administrative staffs and teachers are not enough. The function of design not only includes the arrangement and management of curriculum framework, but also includes diagnosis, comparison and amendment. The work of curriculum design should be done by join forces of educators, experts, administrative staffs, teachers and even parents.

<http://asterix.ednet.lsu.edu/~lsuctp/confpapers/Wang.htm>



## Appendix V

### The NCGIA Core Curriculum in GI Science

The following article, written by David J. Unwin (1997) presents an example of a curriculum in Geographic Information Science (GIS).

In the article, the author discusses various aspects of this module, including the “meaning of Curriculum”, and analysis of various elements of curriculum. It also examines various approaches to designing curriculum.

**NOTE:** Although the article is in the area of Geography Information Science, the principles followed are applicable to any other academic discipline.

#### 1. Curriculum as a system

- There is no clear, accepted definition of the word curriculum. The dictionary definition is *a course of study*, but this gives little away and educational theorists invariably give a much wider definition that includes: Explicit statements of ideology underlying the instruction (why are you teaching it, and why is the teaching the way it is?)
  - General long-term aims (what are students intended to gain from following the course?)
  - Specific, testable, short-term objectives (what will they be able to do as a result of following the course?)
  - Resources to be used (what is needed to deliver the course?)
  - The delivery methods to be employed (how is it to be taught?)
  - Timing of the units and their sequencing (when is it to be taught and in what order?)
  - Assessment procedures and the balance of assessments to be made (how, when and why will it be examined?)
  - A methodology for evaluating how well the course has been received (how will the instructor acquire feedback from the students about the course?).
    - A curriculum is more than a course title and list of topics or even set of lecture notes.

These constitute a *syllabus* and this is only one component of a curriculum.

- A simple model of the curriculum sees it as an interacting system made up of aims and objectives, assessment and evaluation (not the same thing), teaching methods and content.



- The implications of this system view are:
  - Because changes in any one of these elements will force changes in all the others, curriculum design is a complex and difficult process. It has a high intellectual, conceptual and technical content. More often than not in higher education the curriculum is the work of a single individual or small team following no clear design methodology, often under extreme pressure of time, and with no process documentation on the way.
  - For completeness, all the elements defined above should be considered and present.
  - In theory you could start at any point in the system and begin to design the curriculum, what matters is that all the elements and their linkages are known.
- *As an exercise, think through how these approaches might be used in a practical curriculum design.*

## 2. Curriculum design methodologies

- GIS curricula should be designed and there are a number of formal models of the design process (see Gold *et al.*, 1990; Chance and Jenkins, 1997). Some questions to ask are:
  - Why is the course being taught?
  - What new knowledge, skills and attitudes do I expect my students to develop?
  - If so, what experiences do I need to provide for them?
  - Will all students benefit from the same experiences?
  - What range of experiences is possible?
  - What resources are available? What am I comfortable with, and what would I like to experiment with?
  - How will I know if the course is progressing as intended?
  - How will I know if it succeeds?
- How can a curriculum design be guided? Gold *et al.* (1991, Chapter 10) recognize six possible approaches:

### 2.1) Design through aims and objectives or intended learning outcomes

- This is the equivalent of a *top down* approach to development. It starts from a clear statement of broad educational aims, refines these into a series of explicit and testable objectives, and then devises teaching strategies, content and assessment methods to meet these aims and ob-



jectives. Most of the relevant educational literature tends to favour this approach.

- An educational AIM is a broad statement of the overall motivations for the course such as *to develop an understanding of the theory behind GIS and to develop skills in the application of GIS to problems in environmental management*. In contrast an educational objective is a precise statement written in such a way that it easily translates into something that can be assessed in some way such as *to understand by a practical example the basic principles of semiautomatic digitizing*.
- Educationalists recognize a taxonomy of *educational objectives*. Bloom's taxonomy (Bloom, 1956) (See Appendix III) has six major categories from knowledge, through comprehension, application, analysis and synthesis to evaluation. The ordering of these categories is intended to be broadly hierarchical, each measuring a more complex behaviour than its predecessor and also subsuming it.
- The difficulty of specifying aims and objectives has led many educationalists to argue that it is better to specify a series of intended learning outcomes (ILO). Examples are provided at the head of this, article. The key is to specify something that the student should be able to do after following the course. For example, the aim we used above might translate into an ILO such as *'after completing this module, you should be able to use a semiautomatic digitiser to input and structure basic vector data in the ARC/INFO GIS system'*. Notice that this is very easily converted into a task that students would have to complete in the laboratory. Without such a laboratory exercise, the same ILO might be *'after completing this module, you will be able to state how line data on a map can be captured for input into the ARC/INFO GIS using a semiautomatic digitiser'*. At a higher level in the taxonomy of objectives, students might have an ILO which asks them to take an evaluative view *'after completing this module you will be able to list the advantages and disadvantages of semiautomatic digitising related to raster scanning as input for line data into the ARC/INFO GIS'*.
- The advantages of both aims and objectives and ILOs are that they:
  - Communicates teacher's intentions clearly and unequivocally
  - Provide an immediate framework for course structure and content
  - Guide the selection of appropriate teaching and learning resources
  - Help both evaluation and assessment.
- The major problem with this very formal approach in which everything is written down in advance is that once started, it is hard to change tack, possibly as a response to student feedback on the course or changing circumstances.



## 2.2) Design by subject matter

- An obvious way to design a curriculum is to write down a set of topics that will be taught. Many instructors (e.g. the NCGIA Core Curriculum itself) have started at syllabus and content, specifying WHAT should be taught and then gone on to consider all the other elements. This is a *content driven* approach to curriculum design and this approach is the one that has necessarily been taken by almost all the published examples in GIS.

This is an approach that can be considered to be as bottom up. There are at least six reasons why this approach should be modified:

Research evidence shows that *syllabus content is not what most influences student learning*. It is the precisely extra components that turn a syllabus of topics into a curriculum, such as attitudes to study, assessment tasks and so on, that most define what they ultimately remember and use in later life.

- o A published syllabus may actually hide the real content. Educationists also talk of the importance of an 'hidden' curriculum and various departmental cultures.
 

These form a hidden agenda of implicit demands, which may run totally counter to the explicit syllabus. In practice, assessment in the form of the examination questions set often reveals this hidden curriculum, which is why the study of past examination papers is such a useful student revision method.
- o *Content dates rapidly*. What is currently fashionable in research is often ephemera, to be replaced very rapidly by other materials. This is particularly likely to be the case in a rapidly expanding field like GIS.
- o Course content always undergoes a series of *pedagogic transformations* on the way from teacher to taught which filter and transform it. Thus the real 'content' of a course can be defined in several ways. Is it what was originally intended should be taught, what was actually delivered, what was added to this by teacher/student interaction, what the students actually wrote down, what they remembered, or what they took from the course into the world of work?

C = what it was intended to teach.

C1= what actually was taught

C2= what the students actually wrote down

C3= this content after modification by the students additional work and interaction with others

C4= this content as it was remembered and reproduced



- o Notice:
  - Each transformation will be noisy.
  - The absence of any clear feedback loops.
- o Designs which build up in this way can be perfectly rational (the NC-GIA example!) but there is a tendency for designers to lose sight of the overall course structure when using this approach.
- o These two approaches are the most common, but Gold et al (1990) recognise four other possible approaches:

### **2.3) Design building on teacher motivations**

- A seemingly radical approach to curriculum design that may be far more common than instructors like to recognise is a design, which simply builds on the motivations, experience and interest of those delivering the course. Purists will argue that this will give an unbalanced view of GIS, but there are several arguments in its favour. First, the instructor will be knowledgeable and enthusiastic and hence teach 'better'. Secondly, this enthusiasm may well be transmitted to students who respond by working harder and with greater commitment. The final result could well be a better experience than that of a course given by instructors less at ease with the material and less enthusiastic. This type of curriculum at BA/BS level often leads good students directly into Graduate School, but this is likely to be at some cost in general awareness of the field for those who do not.

### **2.4) Design for resource availability**

- Given that there is a large number of GIS education resources such as machine tutorials, CD-ROM, WWW sites, published pencil and paper exercises, text books and vendor instruction manuals it is possible to design a curriculum that builds on these resources. In USA, it is relatively common for introductory classes to be based very closely around a standard, specified course text. There is a different tradition in UK, but the logic of this approach is beginning to be more widely accepted. It has the advantage of providing a clear 'map' of what is to be covered and in what sequence, allows students time to work on the materials out of class and thus reduces the number of steps in what above was called the pedagogic transformations.





### 2.5) Student centered design for individual needs and knowledge.

- Finally, and possibly the most challenging approach of all, *student-centered design* that begins by an examination of individual student needs and attempts to provide course materials to meet them. The problem with this model is that only seldom do educators ‘listen to the learner’ and, even if they did, it is by no means clear that students would have a correct perception of the field. The student’s learning environment is a complex one that includes far more than just the formal programme of instruction. It includes interaction with other students, browsing the library, talks with parents, and so on. It should be apparent that this approach must recognise that students adopt very different learning styles, so that what is good for one may be totally inappropriate for another.
  - **The importance of feedback and critical evaluation.** These six approaches to curriculum design are theoretical models. Any one of them is unlikely to be followed in its entirety, either as a ‘top down’ or as a ‘bottom up’ system. In practice, almost everyone will choose a *middle out* strategy that designs by refinement of a central core of materials that most probably already exist. The important point is that there is a design and that all the elements of the curriculum system have been thought about.

### 3. Conclusion: What does a good curriculum look like?

- Designing a curriculum for GIS is not a simple matter and there is no single ‘best’ answer either in the form of the curriculum or even the methodology adopted for its design. A final question we might ask is whether or not it is possible to determine if the result is any good. One way is by always including a careful student of the course once it has been given. Evaluation of this sort is essential and should always be treated seriously, allowing sufficient time in class for any survey questionnaire to be filled out and with the results carefully summarised. It is good practice to post a notice giving the results of the evaluation and providing an instructors commentary.
- Is it possible to anticipate whether or not the curriculum meets its aims? One simple test to apply makes use of the set of *guiding principles of good education* proposed by the American Association of Higher Education (Chickering and Gamson, 1987). According to these a good curriculum should:
  - encourage staff/student contact
  - encourage co-operation between students



- o encourage active learning
  - o provide prompt feedback on performance of both teacher and taught
  - o emphasise 'time on the task'
  - o respect the diverse talents and ways of learning brought to the course by the students
  - o evaluate itself
  - o display a clarity of aims and objectives
  - o make use of the educational literature.
- The golden rule seems to be always to remember that *WE ARE NOT JUST TEACHING*

*GEOGRAPHICAL INFORMATION SYSTEMS BUT WE ARE ALSO TEACHING STUDENTS.*

David J. Unwin, (1997) Curriculum Design for GIS, *NCGIA Core Curriculum in GIScience*, <http://www.ncgia.ucsb.edu/giscc/units/u159/u159.html>, posted January 08, 1998.

The correct URL for this page is: [http://www.ncgia.ucsb.edu/giscc/units/u159/u159\\_f.html](http://www.ncgia.ucsb.edu/giscc/units/u159/u159_f.html).

Last revised: January 08, 1998.

[http://www.ncgia.ucsb.edu/giscc/units/u159/u159\\_f.html](http://www.ncgia.ucsb.edu/giscc/units/u159/u159_f.html)



## Appendix VI

### What Factors Influence Curriculum Design?

Written by: Graciela Garzon

In this article I will try to present my viewpoints of some factors that affect curriculum design. I can start by saying that a well designed curriculum is part of all good teaching and has to meet individual students' needs. One of the primary roles that a teacher performs is that of curriculum designer and implementor of instruction. All teachers need to make wise decisions about the strategies and methods they employ to help students move systematically toward learner goals. Social forces, theories of human development, the nature of learning, and the nature of knowledge are the four bases of curriculum planning. All these four bases must be considered by curriculum planners in order to improve curriculum and instruction (Parkay & Glass). Cultural background, family (more children are raised without benefit of their natural father's or mother's presence, and this factor can have an effect on his/her socioeconomic status), application of technology, changing values and morality, crime and violence, etc are some of the social forces that influence the curriculum. The knowledge of human development enables curriculum planners to design curricula that meet the needs of individual learners at various levels of education. The nature of learning – an understanding of how human beings learn is also of importance for curriculum planners, because they can design so that learners are all maximally engaged and productive. A good planner should understand the distinguishing features of the two families of learning theories: behavioral and cognitive, because each defines the curriculum differently, and each leads to or supports different instructional strategies. Nature of knowledge and the processes through which learners can most effectively acquire that knowledge is another base of curriculum planning of which planners must have an extensive understanding.

#### **Teacher's individual characteristics.**

Effective curriculum design lead to a successful student learning. All researchers agree that the importance of curriculum design decisions made by teachers has a greater impact on student's achievement than the decisions made at the school level (Marzano). Teachers' individual characteristics influence in making decisions about the curriculum and strategies to be used in the classroom. Teachers have a great responsibility on their shoulders, they are who can determine the nature of knowledge: what knowledge is of most worth, what to include and what to exclude from the curriculum, how shall knowledge be organized in the curricu-



lum, how each learner process information, how he/she seek meaning. Teachers' effectiveness has a profound impact on student achievement. Ineffective teachers might impede the learning of their students.

Effective teachers are those who design a curriculum that promotes learning among students with varied backgrounds, interests and learning preferences. They continually seek a deeper understanding of the essence of a subject, to increasingly grasp its wisdom. That understanding is key to a teacher's role in curriculum planning

### **Application of technology**

Application of technology is one of the social forces that influence the curriculum. When you consider the fact that computers have been in schools for almost twenty years, and considering that most teachers have participated in some type of professional development, it is still surprising to see how many teachers there are who do not include technology at all in their lesson planning. There are a few research studies (c.f., Macro, 1995) that indicate that some teachers have a natural proclivity toward using technology in their classroom curriculum design, while others do not. Effective use of technology in the classroom requires improvements in teaching. It's the combined effect of effective teaching and pedagogically sound technologies that lead to improvements in learning. Teachers have to discover in what ways technology is a tool that supports a particular teaching or learning strategy that they believe will benefit their students.

### **Student's Cultural Background And Socioeconomic Status**

One of the most perceived truisms in education has been that student background characteristics are important determinants of student achievement. Among these student background characteristics, we can cite cultural background and socioeconomic status. Cultural background has profound implication for the processes of curriculum planning. The number of students from diverse cultural backgrounds is increasing in most of America's schools, colleges, and universities. In the last decades, the United States has become more ethnically and culturally diverse, and curriculum planners see cultural diversity as an asset to be preserved and valued. A curriculum that is multicultural is a continuous, integrated, multiethnic, multidisciplinary process for educating all students about diversity and sameness. Diversity factors include but are not limited to race, ethnicity, region, religion, gender, language, socioeconomic status, age, and individuals with disabilities. It encompasses curricular infusion and instructional strategies in all subject areas. Education that is multicultural prepares students to live, learn, interact, and work



creatively in an interdependent global society by fostering mutual appreciation and respect (Brush & Haynes).

### **Interactions Between Teachers And Students**

Interaction between teachers and students is one of the major resources in curriculum planning. Research has shown many times that learning is significantly improved when students share in planning and evaluating the curriculum (Alder). The teacher's and learner's goals for a learning experience must be understood by both the teacher and the learners, and the goals must be compatible or they are not likely to be achieved. Hence, curriculum development may be seen as a social, collaborative effort involving teachers and students. Also, an effective student-teacher relationship may be the foundation that allows successful implemented and attained curricula.

An effective student-teacher relationship is characterized by clarity of purpose and guidance, but also by concern for the opinions or needs of students. Effective teachers do not treat all students the same, particularly in situations involving behavior problems. Where some students need encouragement, other students need a gentle reminder, and still others might require a firm reprimand.

### **Classroom Management**

When teachers are planning for instruction, they must include effective techniques to deal with interruptions effectively and efficiently, to have a repertoire of options for dealing with discipline problems, and begin the year with a set of class rules or guidelines which they explicitly teach, monitor, and enforce. In implemented curriculum, it is important to arrange the physical environment of the classroom, establish rules and procedures, maintain attention to lessons and engagement in academic activities. These actions create the positive environment that students and teachers need to promote and maintain a learning environment conducive to successful instruction and student achievement. Classroom disruptions, socializing, informal breaks, and other non instructional activities use up some of the classroom time. Classroom order encourages student engagement, which supports learning. Without order a teacher is hard pressed to promote student learning.

### **Conclusion**

The essence of our job as teachers is making sure that the curriculum serves as a catalyst for powerful learning for students who, with our guidance and support, become skilled in and committed to the process of learning, and on the creation of more possibilities for formal schooling in adulthood for disadvantaged learners.



## Resources

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## Appendix VII

### The Curriculum Development Process

In the past, curriculum development committees were typically composed of the teachers with expertise in the content area who were asked to create scope and sequence documents and to suggest texts and other resources for adoption by school districts. Our understanding of curriculum development has changed. The process is now viewed as an opportunity to develop understanding and ownership by the participants, and hence curriculum development committees include members of all parties with interests in the educational system. Identifying and sequencing the content can have a more positive effect on student achievement when it is combined with effective instructional and assessment strategies as well as a supportive school environment. Therefore, the job of curriculum development committees is more extensive than in the past. Curriculum development committees must research effective practices in order to support school environments that offer rich and varied learning experiences. They must review policies and behaviors that foster community involvement and equitable opportunities for all.

They must consider professional development activities to support the content, instruction, and assessment expectations. The expectations of curriculum development committees cross some boundaries into what were previously defined as administrative roles. While some curriculum development committees might not have the time, resources, or power to assume all of these roles, they can consider the importance of each of the issues raised in this document and delegate related responsibilities to others who can effect these changes.

### Assumptions

- A quality curriculum development process addresses what students should know, be able to do, and be committed to (content), how it is taught (instruction), how it is measured (assessment), and how the educational system is organized (context).
- Every aspect of curriculum development should model inclusive, learner-centered instruction. In other words, district curriculum development committee meetings and district professional development should mirror best teaching practices. Curriculum development, instruction, and assessment should be open, fair processes. Everyone involved must know the purposes for every activity, the materials or processes to be used, the definition of success, and the consequences of failure.



- The goal should be to encourage individuals to be independent, yet collaborate effectively; be self-evaluative yet take others' perceptions into account; be voracious learners, yet commit themselves to a balanced education.
- Curriculum development should reflect the fact that students learn better when topics and concepts are tied together through interdisciplinary curriculum and thematic instruction.
- Curriculum for educating and assessing young children should follow early childhood education guidelines and include involvement of parents and the early childhood community.
- The curriculum development process must assume that students develop at different times; levels or stages must be looked at as ranges rather than specific grade levels or single-age categories.
- Educational accountability means that the district has a clear statement of standards and expectations for students, teachers, instructional aides, parents, district officials, and all others who participate in the particular education community. Both standards and assessments must be known and credible to the entire community. Standards must be evaluated by a variety of assessments. Any evaluation process must identify the measurement yardsticks (processes, instruments), the purposes for measuring, the measurement points or descriptors, and the consequences of meeting or not meeting the stated expectations.
- Professional development should be provided for the curriculum development committee and, when implementing the new curriculum, teachers and staff also need professional development. A significant investment in professional development must be an integral part of any curriculum development process.
- The educational structures must be flexible to allow for the integration of curriculum across the disciplines in cases where such integration would improve motivation of the students and relevance of the content.
- These assumptions must lead to rethinking the conventional structure and schedule of schools in terms of school day, school year, grade levels, subject areas, graduation requirements, student grouping, and physical plant.





### **Why and When Should a District Revise Curriculum?**

Although the curriculum development process results in a curriculum document, an equally important outcome is the involvement of teachers and community members in the process. Teachers, parents, and community members who have contributed to the process will be willing participants in the implementation of the curriculum. Curriculum should be revised not only to address new research findings and the resulting new visions, but also to involve new participants in those visions. Each Alaska school district has its own curriculum development process. This variation notwithstanding, all curriculum plans must be based on a planned cycle of renewal of no longer than six year's duration. (See the Alaska School Curriculum Regulations in the

Reference Points appendix of this document.) Districts should study this state framework

document and begin a process that will prepare their curriculum development committees to address the Alaska content standards in their next revision cycle.

### **What Curriculum Development Committees Can Do to Ensure Success**

The following curriculum development process provides step-by-step suggestions for organizing the work of your curriculum development committee. Your committee may choose a different process although it should contain these basic components.

#### **A. Create a Functional and Collaborative Process.**

1. Establish district curriculum/instruction/assessment committee(s). If you establish committees focusing on separate content areas, design a schedule that allows for collaboration and integration discussions. Seriously consider establishing interdisciplinary committees. Consider the following members:  
District Curriculum Coordinator  
Teachers  
Parents/Community Representatives  
Principals  
Library/Media Specialists  
Students  
District Assessment Specialists  
Content Specialists  
Business Representatives  
University Faculty
2. Plan an initial training on group processes to facilitate productive cooperation.



3. Analyze the *Alaska 2000 Goals*, the Alaska content standards and key elements, and reform suggestions from professional organizations. Become very familiar with the basic premises of these documents. Reading and study groups are effective for this purpose.
4. Develop a mission and philosophy statement for the district in light of district or state standards.
5. Create an environment in which all committee members can identify and communicate their roles within the committee, who they represent, and their stake in this change.
6. Develop a timeline for the curriculum revision process. The timeline needs to conform to the six-year review process required by Alaska Statutes.
7. Develop a system for soliciting information, communicating your decisions, and receiving teacher and community feedback at each step of the process. Work to ensure the support of local and district personnel and community members such as

School Board Members, who can

- o serve as strong advocates of curriculum transformation,
- o provide strong public support for standards-based instructional programmes; Superintendents, who can
- o establish a support system that promotes risk taking,
- o provide adequate resources for curriculum development, professional development, and assessment;

Curriculum Coordinators, who can

- o collect information and current research,
- o provide leadership in planning and coordinating the curriculum reform effort;

Principals, who can

- o study research-based instructional issues,
- o promote action research in their schools,
- o support risk taking and creativity in teachers,
- o allocate time and resources for curriculum, instruction, and assessment development; Teachers, who can
- o collect information on current effective practices in their schools,
- o provide demonstration lessons to the public and their colleagues;



Parents/Community Representatives, who can

- o share their expertise and experiences,
  - o serve as cooperative advisors, editors, and advocates for their children;
- and Students, who can
- o help define acceptable levels of expectations,
  - o identify motivating practices to improve student participation.
8. Develop and implement an ongoing, systematic process for evaluating progress.

#### **B. Make a Curriculum Inventory. Identify Gaps.**

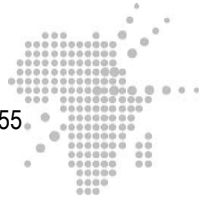
1. Identify what is currently being taught and the local expertise in the district.
2. Solicit the thoughts, recommendations, and feelings about the current strengths and weaknesses and the future curriculum needs from all community members.
3. Cluster and compare the results of the inventory. Make decisions about what is needed.

#### **C. Develop the Curriculum and Assessment Guidelines.**

1. Establish subcommittees for the different student grouping levels (preschool, primary, intermediate, and middle and high school) or create another process that ensures representation of teachers from all levels.
2. Determine performance standards that are appropriate for students at different levels. (The Department of Education & Early Development is currently developing Alaska student performance standards for students at benchmark ages 8-10, 12-14, and 16-18.)
3. Determine expectations and model assessments for each level and develop model portfolios that demonstrate the attainment of student standards.
4. Implement the feedback and editing process on the new curriculum.

#### **D. Create Classroom Instructional Models That Support the Curriculum and Assessment Guidelines.**

1. Choose topics that can address one or more standards. Choose some topics that are integrated across several disciplines to provide effective interdisciplinary models.
2. Choose instructional methods and assessment strategies.
3. Identify how the instruction will prepare the students to meet the Alaska content standards.



4. Choose supportive curricular materials and technology.
5. Ask teachers to pilot specific instructional methods in their classrooms. Solicit feedback and editing.
6. Revisit your Curriculum and Assessment Guidelines. Modify if necessary.

**E. Identify Resources Needed. Determine Budgetary Demands and Priorities.**

1. Support the use or development of facility resources that encourage cooperative work, community connections, and applications in real-life contexts. Classrooms should have tables that promote small-group cooperative activities. Students should have ready access to the world outside of the school building through telecommunications and doorways. Electrical outlets must be adequate and dependable to support the increased technology in the classroom. Buildings should be wired to support local area networking via computers.
2. Review hiring practices to guarantee that districts recruit highly qualified teachers who are reflective of the local cultures and have specific training in a variety of instructional and assessment strategies.
3. Provide cultural sensitivity workshops for all personnel.
4. Ensure that adequate time resources are provided for teachers as described in the section on Preservice Education and Professional Development.

**F. Provide Professional Development Opportunities for All District/School Personnel.**

1. Provide both method and content classes to all interested parties, including instructional aids and classroom volunteers.
2. Create networking opportunities through technology among teachers, administrators, and community members on the local, regional and national levels.
3. Encourage teacher reflection and classroom-based research.
4. Refer to the next section on Preservice Education and Professional Development for more details.

Source:

<http://www.eed.state.ak.us/TLS/Frameworks/langarts/1intro.htm>



## Appendix: VIII

### Change Issues in Curriculum and Instruction/The Teacher as Learner and the Learner as Teacher

From Wikibooks, the open-content textbooks collection

#### TEACHERS AS LEARNERS AND LEARNERS AS TEACHERS

Lauren Florin and Stephanie Sugioka -- May 2007 Edited by Patti Horne

#### Introduction

As early as 1916 when [John Dewey](#) published his seminal work “Democracy and Education”, it was acknowledged that learners should become active participants in the educational process. From this proposition it clearly follows that in learning from their own experience, students become, in a sense, their own teachers. The changed role of the learner has, in turn, implications for that of the teacher. Instead of the source of knowledge, teachers become facilitators of the learning process; that is, their role is to create the set of conditions under which students can best learn from their experiences. Moreover, teachers can fulfill this role only by becoming learners themselves, and a primary source of their learning must be their students. Simply put, teachers who learn become better teachers, and learners who teach become better learners. Although this idea seems straightforward enough, educators have been very slow to put it into practice. However, the rapid technological changes of the last few decades may well provide the catalyst that finally brings about these needed reforms in the field of education.

#### Teachers as Learners

As recently as the 1970s, college professors were expected to have mastered only one knowledge domain—that of their specialty. The walls of the ivory tower were, theoretically, impermeable, and students were to concern themselves only with their text and the knowledge conveyed to them by their professors. The professor was not expected to bring into the conversation his or her personal concerns, the interests or needs of the students, or even events in the outside world. However, in the last two decades, the academic cocoon has been blown wide open by the forces of globalism, multi culturalism, and multimodalism (New London Group, 2000). No longer is it sufficient for educators to concern themselves with the narrow parameters of their chosen fields. They are expected to relate the content of their specialties to the lives of their students and to real-world concerns. To practice sound pedagogy, teachers must be learners in the broadest sense. Not



only must they considerably extend the content of what they learn and teach, they must also subject the ways they acquire and convey their knowledge to rigorous scrutiny—to analysis, reflection, and evaluation (Wooldridge, 2001). Thus, for educators, the learning curve has grown steeper in almost every conceivable respect: They must learn not only what to teach but also how to teach; they must learn not only from written texts and from other experts in their fields but also from their colleagues, their students, and their observation of events in the world outside the academy. With knowledge doubling every year or so, ‘expertise’ now has a shelf life measured in days; everyone must be both learner and teacher; and the sheer challenge of learning

can be managed only through a globe-gridling network that links all minds and all knowledge (Perlman, 1992).

### **Learning to Teach**

How, then, in this new global, multicultural environment should teachers learn to teach? Unlike the previous static mode of instruction delivery, the current model calls for a dynamic process in which teachers should constantly learn from their practice in a “dialectical union of reflection and action” (Hoffman-Lipp, Artiles, & Lopez-Torres, 2003, p. 249). Moreover, even reflective praxis is insufficient for teachers to learn to teach effectively. Teachers must be open to the larger world of politics, culture, and society; they must be able to contextualize both what they learn and what they teach within a larger conceptual framework, “to conceive of their work in broader terms that incorporate sociopolitical contexts of teaching in addition to curricular and pedagogical concerns” (p. 250). No longer can educators afford to sequester themselves behind the walls of academe; rather they must subject both their own practices and the social forces around them to rigorous scrutiny if they are to learn to teach effectively. Teachers must become continual learners. In this world, where we have access to anything we need to know, the teacher’s role has changed. Formal learning is becoming irrelevant. Informal learning, with student centered inquiry, is much more effective and develops life-long problem solving skills. Society needs citizens who can understand and reflect on ideas, work with others towards a common goal, analyze problems and follow through with solutions. To give students these types of skills we must “engage and empower them as we educate them for insight” (Marzano, 2001).



### **Learning from and about Students**

Neither can teachers afford to distance themselves from the students they teach. In the new, learner-centered environment, they must be prepared to learn both about and from their students. The constructivist approach to education that emphasizes the student him or herself rather than the teacher as the source of knowledge is hardly new (Dewey, 1916). However, the belief that teacher and student should maintain a partnership based on mutual learning dominates thinking about pedagogical praxis to an ever-increasing extent—from the elementary grades to the college years. The term “dialogue education” has been used to characterize this more equitable relationship between teacher and student: “Two way, open dialogue needs to be a part of all learning activities” (Wikipedia, 2007). It has been demonstrated that class discussion in which students actively participate and are encouraged to raise questions and pose problems themselves may greatly increase critical thinking skills in students (Tsui, 2002). Thus teachers must learn how to create an environment in which students feel free to openly express and share their ideas. The perception that learning is a mutual experience in which they participate with the instructor has also been shown to contribute to higher cognitive skills in students (Tsui, 2002). Finally, if teachers are willing to abandon the outdated notion that they must be the sole source of knowledge and profess themselves willing and perhaps even grateful to learn from their students, they can model for their students the very learning process that they would most like their students to adopt: “Teachers should be examples of how learning works” (Kaplan, 1998). A perfect opportunity for teachers to learn from their students presents itself in the form of technological innovation within the classroom. Although computer literacy is becoming increasingly important for teacher effectiveness (Selber, 2004), many teachers continue to feel threatened by technologies that they have not mastered (and that some have not even tried). As educators sometimes struggle to engage today’s technology savvy students, allowing students to serve as technology trainers would be an excellent way to provide teachers with some high tech strategies that will captivate students and really get them involved in teaching and learning. Generation Youth and Educators Succeeding (Generation YES) is a national nonprofit organization based in Olympia, Washington, that does just that via GenYES, a program wherein students learn complex computer skills, lesson plan design, and instructional strategies so that they can serve as trainers for K-12 educators (<http://www.soundout.org/teaching.html>). Teachers could learn much from their young students, many of whom possess a great facility for the manipulation of technologies of all kinds. In being thus willing to learn from their students, teachers could not only model the learning process for their students but also validate the students’ sense of self efficacy, the affirmation of which has been shown to enhance student learning in itself (Hoyt & Ames, 1997).



### **Expanding Teacher Learning**

The content of what a teacher must learn to be effective has thus increased exponentially. Not only must teachers learn how to use technology to enrich their teaching, they must also learn how to teach students to use it responsibly and mindfully. Moreover, the teacher must also learn about his or her students—their families, their cultures, their communities (Kaplan, 1998). They need to learn from and about their colleagues. In her book, *A life in school: What the teacher learned*, Jane Tompkins (1996) writes movingly of the ways in which academic life tends to isolate both faculty and students from themselves, from each other, and from the world around them. Yet disciplines and discourse communities overlap, and the educator should make an effort to participate in and foster the community of learners to which he or she belongs (Shulman & Shulman, 2004). Sadly, many forces militate against the need for teachers to learn broadly and deeply. The forces of competition, territoriality, and sheer lack of time tend to limit the sources that could enrich teachers' knowledge and improve their teaching. Minimal professional development and lack of adequate school funding further constrict their opportunities to learn about themselves, their students, and larger cultural and political issues. However, the forces of globalism, multiculturalism, and technological change mandate that teachers extend the boundaries of their learning beyond the strictures of their discipline and the walls of their classrooms and institutions to encompass the larger world that they must prepare their students to enter. In this world, where we have the ability to access endless amounts of information with the push of a button, is it not our job as teachers to learn how to filter through this information in order to find the best answers to our questions? Teachers and students can analyze the validity of data and the soundness of information together. This collaboration brings real learning to the process and reinforces the role of collaboration as it occurs in the real world. The No Child Left Behind Act of 2001 requires that high quality professional development be provided for educators. This would be in hopes of sustaining and supporting high qualified educators. Borko (2004) identifies that professional development should be begin with these three major components: subject matter knowledge, student thinking, and instructional practices.

She proposes a three phase plan to ensure research can be conducted to see that educators are provided with an appropriate program. Essentially professional development should begin with a single site. The program would be evaluated when facilitators then share the program with other schools. The final evaluation phase would then be to compare the program with other similar programs. This focused approach to professional development could work to identify and disperse a high quality program system-wide especially when there may be limited opportunities and funds.





### **Learners as Teachers**

Just as teachers have had to alter their own methods and shift from being their students' sole source of knowledge to one of the many sources, students also have had to shift from being passive receptacles of knowledge to active participants and even to being teachers themselves. Research in the areas of constructivist teaching practices, cooperative learning, and technology have opened new doors and have altered the roles and responsibilities of students today.

### **Learners and Constructivism**

In the traditional classroom, teachers stand at the front of the classroom and present the information to the students. This process is seen as effective because teachers can present an immense amount of information in only a short period of time. The students are expected to absorb the information that the teacher presents and then recall it later on a test. Constructivist research has continued to show us how ineffective and inefficient this process is. Research results also found that in classes where teachers focus on imparting knowledge students indicate they are more likely to have a superficial interest in learning that subject. Conversely, when teaching focuses on students and challenging their perceptions, students report a deeper involvement with learning the subject (Trigwell, Prosser, & Waterhouse, 2004). Proponents of constructivism believe that if teachers shift their teaching practices, especially in mathematics and science, test scores will increase. The constructivist model promotes students as being active participants in the education process. Instead of sitting back and listening to the information, students must construct their own knowledge through meaningful experiences. In the constructivist classroom, the students drive the curriculum, focusing on specific topics that they want to study. One example of how students can accomplish this is through project-based learning. Students can, individually or in groups, generate questions about a real-world problem, investigate the topic through research, analyze and reflect on their findings, and devise solutions to the problem. They then can teach the rest of the students in the class, the teacher, and even the rest of the community about their specific topic. Essentially, they become experts on the topic. In this style of learning, the students take responsibility for their own learning because they truly are interested in it (Curtis, 2001; Lane, 2007; Marlowe & Page, 2005).



### **Class Discussion and Mutual Learning**

Another way students become teachers in constructivist classrooms is through discussion. Class discussions are a central component of **constructivism** since the focus is on the process of learning instead of the product. It is not important whether the students get the right answer, what is important is how their thinking evolves. For example, the math strategy, math talk, is one in which students are given a word problem and asked to solve it. Then, through a class discussion, the students are encouraged to share and explain their solutions to the problem and justify their reasoning. The children are able to “gain greater understanding and ownership of mathematical concepts as they develop and express their own ideas” (Houghton Mifflin, n.d.). Since there are numerous ways to solve any given problem, the students become each other’s teachers as they discuss not only their own logic but also the faults of their peers’ logic. This process is so effective because “hearing and analyzing others’ approaches can supply one with new perspectives; and frequent exposure to different approaches engenders flexible thinking” (Houghton Mifflin, n.d.). The age of the child does not matter; even kindergarteners can effectively be their peers’ teachers during math talk (Kamii, 2000).

### **Cooperative Learning Groups**

A similar method in the classroom where students become the teachers is the use of cooperative learning groups. Cooperative learning is characterized by small groups of students grouped together based on different skill levels. These heterogeneous groups work so efficiently because each student is held accountable for his or her own participation in the group, as well as the group’s being held accountable for their overall performance. Cooperative learning can be used anytime a group needs to work together, whether it be on homework or on completing a class project. Since students are grouped with each other based on differing ability levels, students with certain strengths are able to coach the students with weaker abilities in a given area. This coaching, and subsequent teaching, often enables the students to learn a subject better because they are hearing it from a peer’s perspective. Teachers often approach a topic and attempt to explain it from a level that is much too complex; however, students are often better able to explain a topic because they know where to start. By working together as a team to help each other accomplish an ultimate goal, each individual uses his or her strength to help coach and teach the others so that everyone ends up learning up to his or her potential (Education Broadcasting Corporation, n.d; Surin, 2006).



### **The Teaching Learning Community**

In a world where knowledge and information are abundant and so easily accessible, the roles of teachers and learners are transformed and blended. The walls of the classroom have been extended through new technologies and in this extended classroom roles must adapt. The teacher no longer is the imparter of knowledge and student the passive recipient. Both become part of a collaborative learning community. In this new way of teaching and learning students are empowered. They become self directed and take responsibility for their own learning. Teachers become mentors, guides, coaches and learners themselves. Through powerful web tools such as blogs and wikis, students and teachers have opportunities to create and contribute to knowledge and share ideas. They now can share ideas and communicate with learners world wide. In doing so, both teacher and learner will see the world differently and learn to appreciate the perspectives of others. These new technologies, with which our students are generally quite adept, threaten to widen the divide between teacher and student if teachers are unwilling to become learners and users of technology themselves. As digitally savvy students enter the classroom, teachers have the power to close that gap if they're willing to extend their learning and teaching for the 21<sup>st</sup> century.

### **Learners and Web 2.0**

More recently, technology has drastically changed how students learn in and out of the classroom. Teachers can no longer pretend to have all of the answers because students have an immense amount of knowledge at their fingertips with the internet; more specifically, Web 2.0 enables students to be not only learners but also teachers. Web 2.0 allows all users not only to post comments, articles, and reports on the internet but also to edit and respond to those articles and reports. Teachers can use wikis in their classrooms and have groups of students work together or individually to research and become experts on a topic and then post their reports on the internet for all to read and learn from. This new area of education is allowing all students to become the teachers to not only the students in their classes but to the world. Any student who is interested and wishes to explore and research a particular topic is able to do so and publish his or her work. This not only increases the motivation to do a good job, but since anyone can go in and edit the work, it helps students to be flexible and open to new ideas and procedures. This technology also enables any topic to be approached from multiple perspectives. Students in the past have grown up learning subjects such as history from only one biased perspective. Now, individuals will be able to help contribute to online textbooks and add sections about topics that have never before been taught in the public schools. This technology will revolutionize



our education system as it becomes more widely used and accepted (Alexander, 2006; Standen, 2006).

### Conclusion

Largely as a result of technological change, the forces of **globalism**, **multiculturalism**, and **multimodalism** have conspired to transform and ultimately enrich the roles of both teacher and learner. As teachers extend their learning, learners can claim full ownership of their knowledge in the process of teaching it to others. This results in more effective teachers as well as a greater depth of understanding in students. This model of mutual learning can reform the educational system from within and help it to realize maximum benefits for both teachers and learners.

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## Appendix IX

### Teacher Education

From Wikipedia, the free encyclopedia

**Teacher education** refers to the policies and procedures designed to equip **teachers** with the **knowledge**, **attitudes**, **behaviours** and **skills** they require to perform their tasks effectively in the **school** and **classroom**.

Teacher education is often divided into:

- *initial teacher training / education* (a pre-service course before entering the classroom as a fully responsible teacher);
- *induction* (the process of providing training and support during the first few years of teaching or the first year in a particular school);
- *teacher development* or *continuing professional development (CPD)* (an in-service process for practicing teachers).

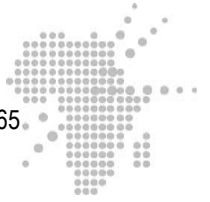
The process of *mentoring* is also relevant.

### Organization

Initial teacher education may be organized according to two basic models.

In the 'consecutive' model, a teacher first obtains a qualification (often a first university degree), and then studies for a further period to gain an additional qualification in teaching; (in some systems this takes the form of a post-graduate degree, possibly even a Masters). The alternative is where a student simultaneously studies both an academic subject and the ways of teaching that subject, leading to a qualification as a teacher of that subject. Other pathways are also available. In some countries, it is possible for a person to receive training as a teacher under the responsibility of an accredited experienced practitioner in a school.

Teacher Education in many countries takes place in institutions of Higher Education.



## Curricula

The question of what knowledge, attitudes, behaviours and skills teachers should possess is the subject of much debate in many cultures. This is understandable, as teachers are entrusted with the transmission to children of society's beliefs, attitudes and deontology, as well as of information, advice and wisdom. Generally, Teacher Education curricula can be broken down into these blocks:

- foundational knowledge and skills--usually this area is about education-related aspects of [philosophy of education](#), [history of education](#), [educational psychology](#), and [sociology of education](#)
- content-area and methods knowledge--often also including ways of teaching and assessing a specific subject, in which case this area may overlap with the first ("foundational") area. There is increasing debate about this aspect; because it is no longer possible to know in advance what kinds of knowledge and skill pupils will need when they enter adult life, it becomes harder to know what kinds of knowledge and skill teachers should have. Increasingly, emphasis is placed upon 'transversal' or 'horizontal' skills (such as 'learning to learn' or 'social competences', which cut across traditional subject boundaries, and therefore call into question traditional ways of designing the Teacher Education curriculum (and traditional ways of working in the classroom).
- practice at classroom teaching or at some other form of educational practice—usually supervised and supported in some way, though not always. Practice can take the form of field observations, student teaching, or internship (See Supervised Field Experiences below.)

## Supervised Field Experiences

- field observations--include observation and limited participation within a classroom under the supervision of the classroom teacher
- student teaching--includes a number of weeks teaching in an assigned classroom under the supervision of the classroom teacher and a supervisor (e.g. from the university)
- internship--teaching candidate is supervised within his or her own classroom

These three areas reflect the organization of most teacher education programs in North America (though not necessarily elsewhere in the world)--courses, modules, and other activities are often organized to belong to one of the three major areas of teacher education. The organization makes the programs more rational or logical in structure. The conventional organization has sometimes also been



criticized, however, as artificial and unrepresentative of how teachers actually experience their work. Problems of practice frequently (perhaps usually) concern foundational issues, curriculum, and practical knowledge simultaneously, and separating them during teacher education may therefore not be helpful.

### **Quality Assurance**

Feedback on the performance of teachers is integral to many state and private education procedures, but takes many different forms. The 'no fault' approach is believed by some to be satisfactory, as weaknesses are carefully identified, assessed and then addressed through the provision of in service training.

### **Stress**

As a profession teaching has very high levels of Work-Related Stress (WRS)<sup>[1]</sup> which are listed as amongst the highest of any profession in some countries, such as the United Kingdom. The degree of this problem is becoming increasingly recognised and support systems are being put into place.<sup>[2][3]</sup>

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Work-Related Stress in teaching

Teacher Support for England & Wales

Teacher Support for Scotland

Retrieved from "[http://en.wikipedia.org/wiki/Teacher\\_education](http://en.wikipedia.org/wiki/Teacher_education)"



## Appendix X

### Rights and Responsibilities of Teachers

#### Professional freedom

The teaching profession should enjoy academic freedom in the discharge of professional duties. Since teachers are particularly qualified to judge the teaching aids and methods most suitable for their pupils, they should be given the essential role in the choice and the adaptation of teaching material, the selection of textbooks and the application of teaching methods, within the framework of approved programmes, and with the assistance of the educational authorities. **Teachers and their organizations should participate in the development of new courses, textbooks and teaching aids**

Any systems of inspection or supervision should be designed to encourage and help teachers in the performance of their professional tasks and should be such as not to diminish the freedom, initiative and responsibility of teachers.

Where any kind of direct assessment of the teacher's work is required, such assessment should be objective and should be made known to the teacher.

Teachers should have a right to appeal against assessments which they deem to be unjustified.

Teachers should be free to make use of such evaluation techniques as they may deem useful for the appraisal of pupil's progress, but should ensure that no unfairness to individual pupils results. The authorities should give due weight to the recommendations of teachers regarding the suitability of individual pupils for courses a further education of different kinds. Every possible effort should be made to promote close co-operation between teachers and parents in the interests of pupils, but teachers should be protected against unfair or unwarranted interference by parents in matters which are essentially the teacher's professional responsibility. Parents having a complaint against a school or a teacher should be given the opportunity of discussing it in the first instance with the school principal and the teacher concerned. Any complaint subsequently addressed to higher authority should be put in writing and a copy should be supplied to the teacher.

Investigations of complaints should be so conducted that the teachers are given a fair opportunity to defend themselves and that no publicity is given to the proceedings. While teachers should exercise the utmost care to avoid accidents to pupils, employers of teachers should safeguard them against the \*\*\* of having damages assessed against them in the event of injury to pupils occurring at school or in school activities away from the school premises or grounds.





### **Responsibilities of teachers**

Recognizing that the status of their profession depends to a considerable extent upon teachers themselves, all teachers should seek to achieve the highest possible standards in all their professional work. Professional standards relating to teacher performance should be defined and maintained with the participation of the teachers' organizations.

Teachers and teachers' organizations should seek to co-operate fully with authorities in the interests of the pupils, of the education service and of society generally.

Codes of ethics or of conduct should be established by the teachers organizations, since such codes greatly contribute to ensuring the prestige of the profession and the exercise of professional duties in accordance with agreed principles. Teachers should be prepared to take their part in extra-curricular activities for the benefit of pupils and adults.

### **Relations between teachers and the education service as a whole**

In order that teachers may discharge their responsibilities, authorities should establish and regularly use recognized means of consultation with teachers' organizations on such matters as educational policy, school organization, and new developments in education service. Authorities and teachers should recognize the importance of the participation of teachers, through their organizations and in other ways, in steps designed to improve the quality of the education service, in educational research, and in the development and dissemination of new improved methods.

Authorities should facilitate the establishments and the work of panels designed, within a school or within a broader framework, to promote the co-operation of teachers of the same subject and should take due account of the opinions and suggestions of such panels.

Administrative and other staff who are responsible for aspects of the education service should seek to establish good relations with teachers and this approach should be equally reciprocated.



### **Rights of teachers**

1. The participation of teachers in social and public life should be encouraged in the interests of the teacher's personal development of the education service and of society as a whole.
2. Teachers should be free to exercise all civic rights generally enjoy by citizens and should be eligible for public office.
3. Where the requirement of public office are such that the teacher has to relinquish his teaching duties, he should be retained in the profession for seniority and pension purposes and should be able to return to his previous post or to an equivalent post after his term public office has expired.
4. Both salaries and working conditions for teachers should be determined through the process of negation between teachers' organizations and the employers of teachers.
5. Statutory or voluntary machinery should be established whereby I right of teachers to negotiate through their organizations with the employers, either public or private, is assured.
6. Appropriate joint machinery should be set up to deal with the settlement of disputes between the teachers and their employers arising out of terms and conditions of employment. If the means and procedures established for these purposes should be exhausted on \*\*\* there should be a breakdown in negotiations between the parties, teachers' organizations should have the right to take such other steps as are normally open to other organizations in the defence of their legitimate interests.. Source:[http://portal.unesco.org/education/en/ev.php-URL\\_ID=6138&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/education/en/ev.php-URL_ID=6138&URL_DO=DO_TOPIC&URL_SECTION=201.html)



## XV. Synthesis of the module

Well done! You have now completed your curriculum studies module.

In **Unit I** we discussed definitions and meaning of key concepts in curriculum.

Curriculum was described as a representation of educational ideas in practice. The meaning of education was provided as the process of acquiring and developing desired knowledge, skills and attitudes.

**Functions of education include** productive, intellectual, personal and social dimensions

Curriculum definitions consist of both broad and narrow ones, for instance “a course of study”; and “all the experiences a learner undergoes under the guidance of the school”.

The scope of curriculum studies as a discipline includes many concepts such as curriculum theory, planning, design, development, implementation and evaluation.

Curriculum theory was described as a “set of related statements that give meaning to the school curriculum by pointing out issues such as “what to teach who is taught; etc. i.e. theories constitute guiding principles for curriculum.

Educational aims, goals and objectives were also examined where aims were considered “visionary” while objectives, the most specific of the terms, were presented as statements of performance to be demonstrated, stated in measurable and observable terms.

**Unit II** presented foundations of curriculum i.e. the bases upon which curriculum is developed. Foundations were described as values, factors traditions and forces that influence the kind, quantity and quality of the experience the school offers its learners.

Four categories of foundations were presented, Historical, philosophical, sociological and psychological foundations.

Historical foundations are those factors and issues from the past that have an influence on the curriculum at present. Philosophical foundations on the other hand focus on the influence of philosophical schools thought on curriculum making. The philosophies discussed included traditional philosophies, including idealism and realism and modern philosophies including pragmatism and existentialism. Educational philosophies discussed focused on perennialism, essentialism and progressivism among others.



Sociological foundations are factors and issues from society that have influence on curriculum. These include culture, social problems, political issues and their influence on curriculum.

Psychological foundations focused on insights gained from the field of psychology and their influence on the learning process; and consequently the curriculum.

**Unit III** presented three major processes in curriculum, i.e. design, development and implementation of curriculum. Curriculum design was described as the organization pattern or structure of the curriculum. It is therefore assists in the organization of the elements of curriculum i.e. aims goals and objectives, subject content, learning activities and evaluation.

Approaches to curriculum design were presented such as subject centred learner centred design and broad fields curriculum.

Curriculum design models were also presented including Ralph Tyler's model, John Goodlad's model and how they guide and influence various aspects of the curriculum making process.

Curriculum development process was described as an activity which results in plans for instruction. That is, a process of determining the appropriate content, the pedagogy and means of evaluation. Curriculum implementation was presented as the actual operationalization of the curriculum in schools.

**Unit IV** focused on curriculum evaluation. This is the process of establishing the extent to which objectives of the curriculum have been achieved during and after the implementation process. Terms related to evaluations were discussed including assessment, tests and measurement.

Purposes of evaluation, for different aspects of the curriculum were presented. For example, providing feedback for individual learners, for the classroom teacher and even for the community that support the school.

Types of evaluation were given including formative i.e. ongoing and summative; at the end of the programme. Criteria for evaluation were given including consistency with objectives, comprehensiveness and continuity.

**Unit V**, curriculum change and innovation, highlighted the need for continuous change and review of curriculum in view of changing trends in society including economic, social political and technological changes.

Types of change were presented as minor, medium and major changes.

Curriculum innovation on the other hand was presented as means of introducing something new that deviates from the standard practice. Criteria for judging the value of curriculum innovation include; relative advantage (over previous curriculum), compatibility and complexity.



Models of curriculum innovation were discussed including the Research, Development and Diffusion model and the Social Interaction model as well as the problem solving model.

The last **Unit VI**, the teacher and the curriculum was included in this module because of the crucial role teachers' play in the entire process of curriculum making, implementation and evaluation.

Meaning of the terms teacher and teacher education were explained where the teacher is considered as a person who is responsible for the education of pupils/student.

Teacher education was described as a process by which an individual gains knowledge and develops skills and attitudes to enable him/her to perform the art of teaching effectively.

A good teacher was presented as one with expertise in his/her area of specialization; good conduct of his/her personal life, adaptable and flexible to handle any situation in his/her personal life as well as in school among other qualities.

Approaches to teacher education were also presented; including pre – service and in – service the latter being important for the development of the teacher while in the profession.

The question of whether teaching is a profession was explored, in relation to the characteristics of an ideal profession which include expertise and commitment.

Rights and responsibilities of a teacher were highlighted; to help you the student teacher, familiarize yourself with what is expected of you as you enter the profession.



## XVI. Summative Evaluation

### Questions

- Q. 1. Explain the role of objectives in the Curriculum development process.
- Q. 2. a) What is a curriculum foundation?  
b) Explain the role of psychological foundations in curriculum development.
- Q. 3. Curriculum designing today is said to be moving away from subject to learner centred approach.  
a) Distinguish between subject centred and learner centred curriculum design  
b) Discuss the extent to which each of the approaches are used in curriculum development in your country.
- Q. 4. a) Explain the main factors in the modern society that would influence curriculum change.  
b) Discuss the rationale for any recent changes in the school curriculum in your country.
- Q. 5. Discuss the role played by evaluation in curriculum development.
- Q. 6. Discuss the extent to which teaching can be considered be a profession in yourcountry.

### Possible answers

- Q.1. First describe what an objective is; A statement of performance to be demonstrated, stated in measurable and observable terms  
Objectives are derived from a variety of sources, including the learners needs and interests; the society, and subject specialist. Objectives assist the curriculum process in the following ways:
- They guide decision in selecting content and learning experiences.
  - They clarify what skills and objectives are to be developed at the various levels of learning.
  - Help in specifying the necessary teaching and learning resources.
  - They help in designing appropriate teaching strategies.
  - They facilitate the evaluation process, thus making accountability easier for both the teacher and learners.



Q 2.a) A foundation is the basis upon which a curriculum is developed. It includes values, traditions, factors and forces that influence the kind, quantity and quality of the experience the school offers its learners.

(Explain further using examples issues raised and their influence on curriculum.)

b) Psychological foundations: Insights gained from the field of psychology that have an influence on the learning process and consequently the curriculum.

Psychology helps in curriculum making in a variety of ways including:

- Providing knowledge of the developmental levels of the learners; and hence identification and selection of appropriate objective.
- The selection of content that the learner can comprehend.
- Determining suitable methodology/teaching strategies.
- Determining the length of time required and conditions of learning in achieving given objectives among others.

Q 3. Subject Centred designs emphasize on inclusion of subject matter in the curriculum, without much consideration of the learners' characteristics. The curriculum is presented in separate subjects.

Proponents of the design argue that;

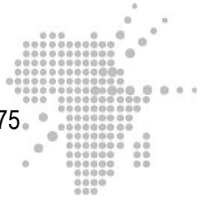
1. It allows in-depth analysis of subject matter and thus helps develop intellectual powers in learners more effectively than other approaches.
2. It lends itself to easier and simpler planning of curriculum; among other reasons.

Critics of the approach however argue that;

1. It brings out a high degree of fragmentation of knowledge
2. The approach tends to neglect learners' needs, interests and experiences and may therefore not be as relevant to the learners, among other reasons.

On the other hand, Learner Centred Curriculum designs emphasize organization of the curriculum around the needs, interests, abilities and aspirations of students, therefore results in a more relevant curriculum.

Also the students are likely to be more actively involved in the learning process due to increased interest.



However, critics argue that

1. The needs and interest of learners are often short lived, hence not adequate to base a curriculum on
2. A lot of resources are required to address individual learners differences

Thus it would be expensive to implement. (*Identify other arguments for and against the approaches*).

#### Application of the designs in different countries

(*Analyze the curriculum in your country.*)

It is likely that' since yours is a developing country, the emphasis might primarily be a subject centred approach. Highlight aspects of the curriculum that might suggest inclusion of the learner centred approach and the extent to which each approach is used.

Q 4. There are a variety of factors within the modern society that influence curriculum change including:

- Social and demographic factors
- Economic factors
- Political factors
- Technological factors
- Knowledge explosion

(Epistemological factors)

*Discuss each of the factors and relate them to the Curriculum change.*

In social factors for example, you could highlight social problems such as HIV/ Aids which is a major challenge in many African countries. How have such issues influenced curriculum change in your country? Indicate specific aspect of the curriculum.

Q5. First, you will need to explain some terms, meaning of evaluation i.e. the process of establishing the extent to which curriculum objectives have been achieved.

Secondly, explain both formative and summative evaluation.

Formative evaluation, during the process of implementation.

Summative evaluation – carried out at the end of a programme.





Formative evaluation provides continuous feedback regarding students achievement in relation to the objectives.

One is able to assess the appropriateness of the objectives, the subject matter and the teaching and learning strategies employed, as well as the appropriateness and adequacy of learning resources.

Corrective measures can therefore be made in time and curriculum revised appropriately

Summative evaluation will provide data to facilitate decisions such as:

- Whether to continue with the programme; modify it; or even stop the programme altogether and institute a new programme.

Q4. Evaluation therefore provides objective data during the entire curriculum development process for decision making

b) Rationale for recent changes in curriculum in your country.

First give examples of such changes from your country.

In Kenya for example, there was a recent change that included incorporation of emerging issues in the country. The issues highlighted included Drug and substance abuse, HIV/AIDS, among others.

The rationale was that those issues had reached alarming proportions in the country especially among the youth. It was argued that the youth, both at primary and secondary levels and even at higher levels of education would benefit greatly from awareness creation, and acquiring appropriate knowledge skills to protect themselves. The knowledge from the school setting is expected to permeate the rest of the society.

Q6. Extent to which curriculum can be considered a profession in your country.

In your discussion, you were expected to highlight on the characteristics of an ideal profession expertise, commitment, among others.

You needed also to explain the level of training of teachers in your country; for example, what is the percentage of the trained versus the untrained teachers.

Assessing the level of commitment of the teachers and the factors that influence such commitment, e.g. terms and conditions of service including salaries and allowance, issue of leave. Any other issues affecting the teaching profession in your country need to be highlighted and discussed.



## XVII. References

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