

UNIT 4: Models of Curriculum Design



Introduction

Curriculum design is a complex but systematic process. This unit describes a variety of models of curriculum design in order to make this complex activity understandable and manageable. It is important for you as a teacher to understand how the curriculum you are using in your school was designed.

Objectives

After completing this unit, you should be able to:

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

Content

This unit covers the following models of curriculum design:

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

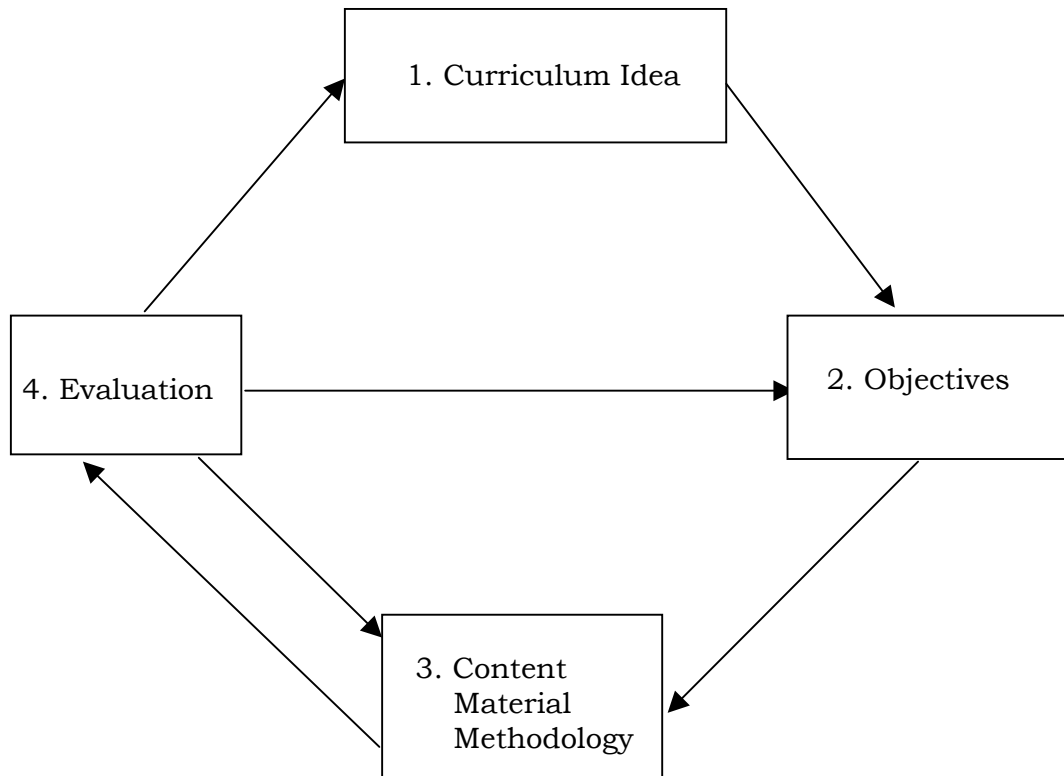
The Objectives Model

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

This model comprises four main steps:

- agreeing on broad aims which are analysed into objectives,
- constructing a curriculum to achieve these objectives,
- refining the curriculum in practice by testing its capacity to achieve its objectives, and
- communicating the curriculum to the teachers through the conceptual framework of the objectives. (Gatawa, 1990: 30)

Objectives Model



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

You will note that in this model:

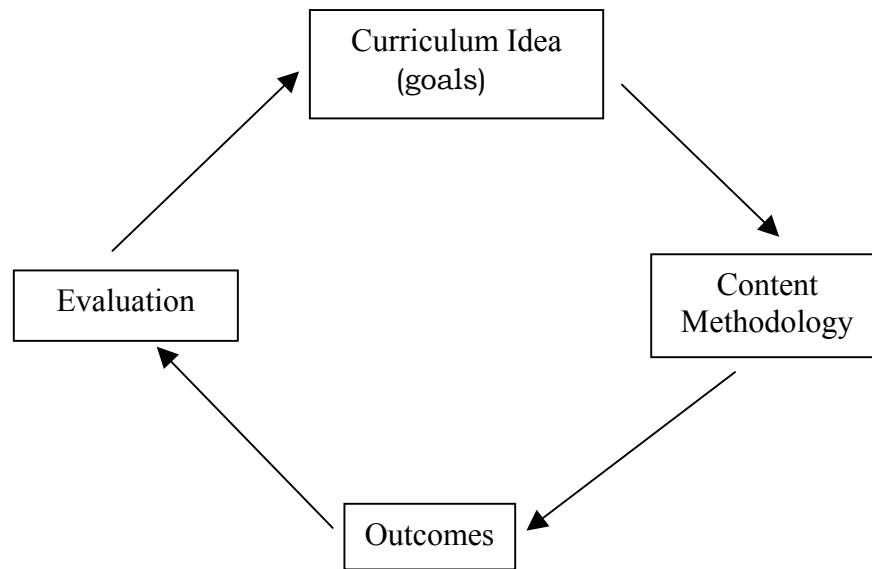
- Evaluation is done at each stage of the curriculum design.
- Content, materials and methodology are derived from the objectives.

The Process Model

Unlike the objectives model, this model does not consider objectives to be important. Using this model presupposes that:

- Content has its own value. Therefore, it should not be selected on the basis of the achievement of objectives.
- Content involves procedures, concepts and criteria that can be used to appraise the curriculum.
- Translating content into objectives may result in knowledge being distorted.
- Learning activities have their own value and can be measured in terms of their own standard. For this reason, learning activities can stand on their own. (Gatawa, 1990: 31)

Process Model



Adapted from Gatawa, B. S. M. (1990: 31). *The Politics of the School Curriculum: An Introduction*. Harare: Jongwe Press.

It is important to note that in the process model:

- Content and methodology are derived from the goals. Each of them has outcomes that can be evaluated.
- The evaluation results from the outcome are fed into the goals, which will later influence the content and methodologies. Unlike the objectives model, there is no direct evaluation of the content and methodologies.



Self-Assessment 1

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

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



The process and objectives models of curriculum design are not the only models. The remaining part of the unit will cover models developed by Tyler, Wheeler and Kerr.

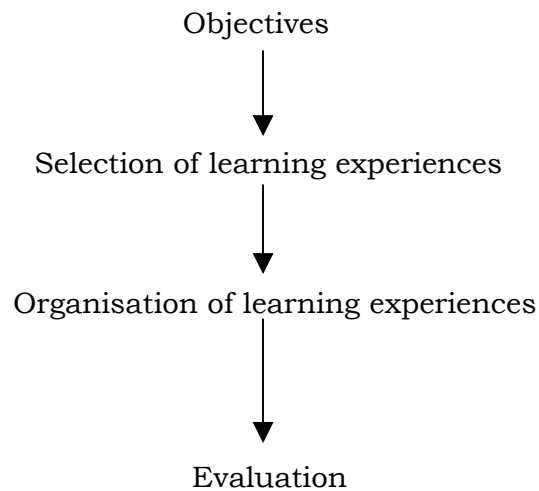
Tyler's Model

Tyler's model for curriculum designing is based on the following questions:

- What educational purposes should the school seek to attain?

- What educational experiences can be provided that are likely to attain these purposes?
- How can these educational experiences be effectively organised?
- How can we determine whether these purposes are being attained?

Tyler's Model



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

The model is linear in nature, starting from objectives and ending with evaluation. In this model, evaluation is terminal. It is important to note that:

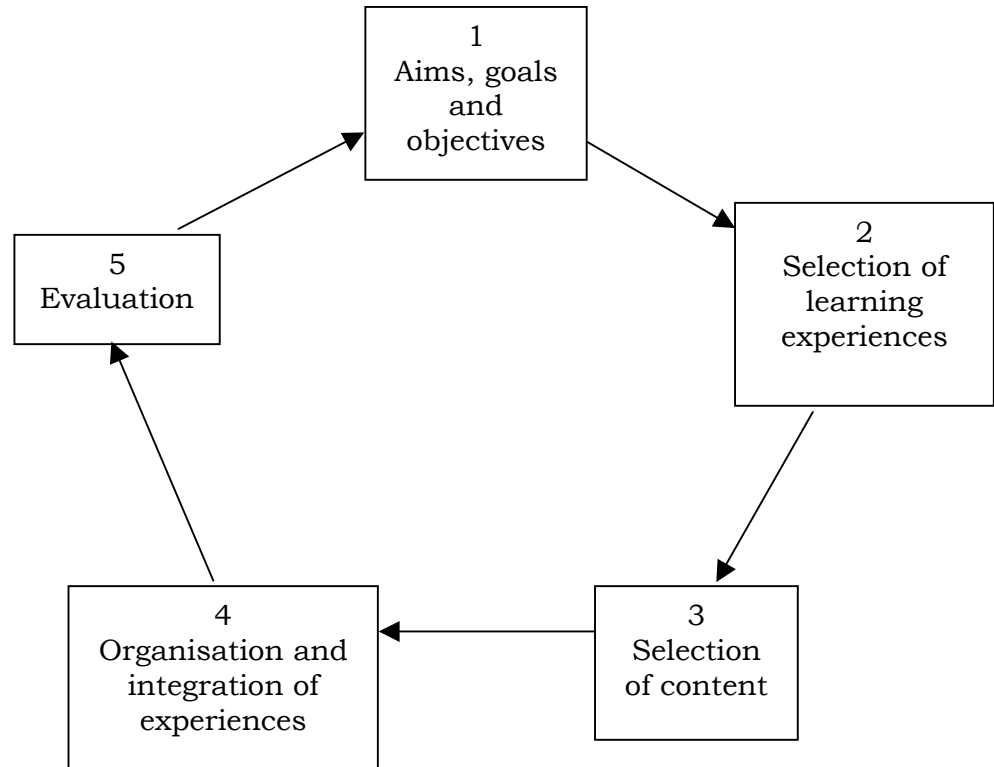
- Objectives form the basis for the selection and organisation of learning experiences.
- Objectives form the basis for assessing the curriculum.
- Objectives are derived from the learner, contemporary life and subject specialist.

To Tyler, evaluation is a process by which one matches the initial expectation with the outcomes.

Wheeler's Model

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

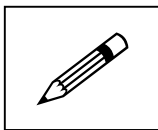
Wheeler's Model



Adapted from Urevbu, A. O. (1985: 22). *Curriculum Studies*.

Wheeler contends that:

- Aims should be discussed as behaviours referring to the end product of learning which yields the ultimate goals. One can think of these ultimate goals as outcomes.
- Aims are formulated from the general to the specific in curriculum planning. This results in the formulation of objectives at both an enabling and a terminal level.
- Content is distinguished from the learning experiences which determine that content.



Self-Assessment 2

Define a terminal objective and an enabling objective.

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

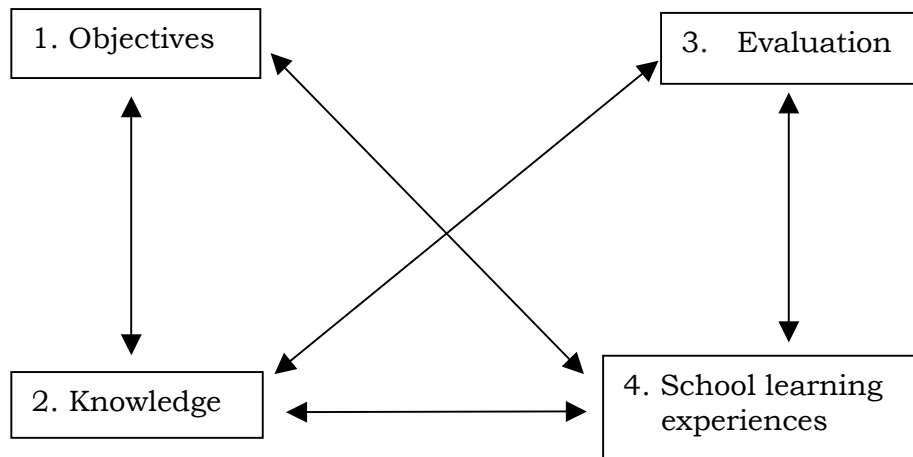


Kerr's Model

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

- objectives,
- knowledge,
- evaluation, and
- school learning experiences.

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



What you should note about the model is that:

- the four domains are interrelated directly or indirectly, and
- objectives are derived from school learning experiences and knowledge.

In Kerr's model, objectives are divided into three groups:

- affective
- cognitive
- psychomotor.

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

- organised,
- integrated,
- sequenced, and
- reinforced.

Evaluation in Kerr's model is the collection of information for use in making decisions about the curriculum.

School learning experiences are influenced by societal opportunities, the school community, pupil and teacher

relationships, individual differences, teaching methods, content and the maturity of the learners. These experiences are evaluated through tests, interviews, assessments and other reasonable methods.

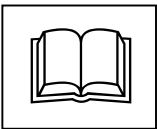
In his model, Kerr asserts that everything influences everything else and that it is possible to start an analysis at any point (Urevbu, 1985: 22).



Self-Assessment 3

In Kerr's model, what do you think are the important points raised about objectives?

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



There are many curriculum design models. The models discussed in this unit are meant to give you an idea of how they are used to develop a curriculum.

In designing a curriculum, you need to:

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

If you complete these eight stages, you would have conducted what is generally referred to as the task analysis process.



Summary

The curriculum design models discussed show that curriculum designing is conducted stage by stage. Some of the models discussed consider the process to be more important than the objectives. Other models take objectives to be the most important feature of curriculum design. Generally, all models stress the importance of considering a variety of factors that influence curriculum.

Now that you have read about the types of curriculum design, factors that influence curriculum design and models used to

design the curriculum, the next unit discusses the personnel and departments involved in the curriculum design process.



Reflection

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



Unit Test

List the stages in the task analysis process that you need to follow when designing a curriculum.

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



Suggested Answers

Self-Assessment 1

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

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

Self-Assessment 2

Below are possible definitions for terminal and enabling objectives.

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

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

Self-Assessment 3

In Kerr's model, objectives:

- are based on learning experiences and knowledge, societal needs and the requirements of the disciplines;
- are divided into cognitive, psychomotor and effective domains; and
- give the standard on which evaluation is based.

Unit Test

Your answer may take the form below.

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

- Establish or obtain general goals of education.
- Reduce the general goals to specific instructional objectives, including objectives for different domains and levels.

- Assess prior student knowledge and/or abilities.
- Break learning into small, sequential steps.
- Identify teacher behaviour.
- Identify student behaviour.
- Write a description of the lesson to be delivered.
- Evaluate to determine if the intended outcomes have been achieved.