

Module 14

CURRICULUM PRACTICE



THE COMMONWEALTH *of* LEARNING

General Education Modules

for Upper Primary and Junior Secondary School Teachers of Science, Technology and Mathematics by Distance in the Southern African Development Community (SADC)

Developed by

The Southern African Development Community

Ministries of Education in:

- Botswana
- Malawi
- Mozambique
- Namibia
- South Africa
- Tanzania
- Zambia
- Zimbabwe

In partnership with The Commonwealth of Learning

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GENERAL EDUCATION MODULES

This module is one of a series prepared under the auspices of the Southern African Development Community (SADC) and The Commonwealth of Learning as part of the Science, Technology and Mathematics Programme (STAMP 2000+). These General Education modules enable teachers to enhance their professional skills through distance and open learning. Many individuals and groups have been involved in writing and producing these modules. We trust that they will benefit not only the teachers who use them, but also, ultimately, their students and the communities and nations in which they live.

The eighteen General Education modules are as follows:

- Module 1: *Multigrade Teaching: Introduction to Multigrade Teaching*
- Module 2: *Multigrade Teaching: Classroom Organisation and Management*
- Module 3: *The Reading Process*
- Module 4: *Developing Reading Skills*
- Module 5: *Special Educational Needs: An Introduction to Teaching Traumatized Children*
- Module 6: *Special Educational Needs: A Practical Guide to Teaching Traumatized Children*
- Module 7: *Education Management Development: Part A*
- Module 8: *Education Management Development: Part B*
- Module 9: *Child Development*
- Module 10: *Concepts of Learning*
- Module 11: *An Introduction to Concepts in Language and Communication*
- Module 12: *Language and Communication: Language in Use*
- Module 13: *Curriculum Theory, Design and Assessment*
- Module 14: *Curriculum Practice*
- Module 15: *A Theoretical Framework on Innovations in Education*
- Module 16: *Effects of Social Changes on Education*
- Module 17: *Comparative Education: Introduction to Key Concepts in Comparative Education*
- Module 18: *Comparative Education: Themes and Trends in Comparative Education in SADC Countries*

A MESSAGE FROM THE COMMONWEALTH OF LEARNING



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Module 14

CURRICULUM PRACTICE

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CURRICULUM PRACTICE

This is one of a series of modules in the General Education courses developed by Ministries of Education in the SADC region in cooperation with the Commonwealth of Learning.

Curriculum design, development and assessment are central to teaching and learning in the classroom. In a number of African countries, teachers have either a professional teaching qualification or only an academic qualification. For this reason, it is important for all teachers to have a common base in the theory, design and assessment of the curriculum. This module describes the basic elements, factors and institutions involved in the design and assessment of school curricula.

Module 14 focuses on the details of designing a school-based curriculum and syllabus, as well as on timetabling, resource allocation, delivery methodologies and the evaluation of the school curriculum.

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LEARNING TIPS

You will find the following tips helpful as you study this module.

- **Set aside some time each day to work on this module.** If possible, study at the same time and in the same place so you are comfortable with your study surroundings. Learning at a distance requires discipline and motivation.
- **Go through the module unit by unit.**
- **Note any words you do not understand.** Look them up in a dictionary or other reference source or discuss them with your colleagues.
- **Underline or highlight important passages.** Make summary notes in the margins of long passages. Writing will help you to remember the material. You may also choose to make diagrams that illustrate how different ideas are related or list the steps in a procedure or technique.
- As you work through this module, **keep in mind your learners and their educational needs** as well as your instructional goals and your subject matter. How will you apply what you are learning?
- Read the assignment instructions carefully. Then, **do all the self-assessment activities** before proceeding to the Suggested Answers section.
- **As you undertake each activity, relate it to the practice of teaching** and analyse how it will help you to enhance the teaching-learning situation. Always ask yourself how you could use this material.
- **Apply some of the suggested techniques to your teaching.** All suggestions may not be appropriate for your situation, but how will you know unless you try them? Keep a record of what techniques work and an explanation of why some techniques appeared to fail. What does not work now may work later with different students.
- It may be difficult, but try to **meet occasionally with other teachers** to discuss the content and application of suggestions provided in this module.
- If you experience difficulty in understanding some aspect of the module, do not despair! You are meant to be challenged. **Do not give up!** Just remember that your goal is to be the best teacher that you can be. Think of what you would tell a student who was experiencing difficulty in your classroom. Then, apply the same advice to yourself.

ICONS

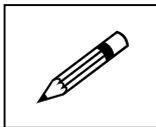
Throughout each module, you will find the following icons or graphic symbols that alert you to a change in activity within the module. Only the icons that are required are used in each module.



Text or Reading Material: provides information about the topics that are covered in a module. The subject matter for each SADC module is organised into units.



Introductory Activity: requires you to focus on the content that will be discussed in a unit.



Self-Assessment: enables you to check your understanding of what you have read and, in some cases, to apply the information presented in the unit to new situations.



Practice Activity: encourages you to review and apply what you have learned before taking a unit test.



Reflection: asks you to relate what you have learned to your work as a teacher or education officer in your community.



Summary: highlights or provides an overview of the most important points covered in a unit.

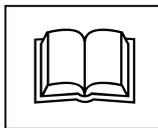


Unit Test: concludes each unit.



Suggested Answers: allow you to evaluate your learning by providing sample answers to assessments, activities and the unit test.

UNIT 1: School-Based Curriculum



Introduction

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

Objectives

After completing this unit, you should be able to:

1. Define a school-based curriculum.
2. Give reasons why a school-based curriculum should be designed.
3. Explain factors that influence a school-based curriculum.
4. Outline the stages in developing a school-based curriculum.

Content

This unit will cover the following topics:

- definition of a school curriculum
- reasons for designing a school curriculum
- factors that influence a school curriculum
- the process of designing a school curriculum.

What Is a School Curriculum?

The term curriculum was defined in Unit 1 of Module 13. Do you still remember the definition?

For the purpose of this unit, school shall be defined as a social institution designed to give formal learning to children. As a teacher, you are aware that a **school curriculum** is a programme of selected content and learning experiences offered by a school and capable of either modifying or changing learner behaviour.

Included in this definition are the following ideas:

- There is a source from which content and learning experiences are selected.
- One or more people select content and learning experiences. Their selection is based on specified criteria and/or influenced by a number of factors.
- The learner should experience a change in behaviour after completing a programme. Ideally, the behaviour

changes should be those expected by the educators involved in the teaching-learning process.

As the unit unfolds, these ideas will be developed further. Have you ever looked at your own school's curriculum? You should notice that it is a list of subjects and experiences offered by your school to the learners. Have you wondered "Why were those subjects chosen and not others?" Another question may be, "Who chose these subjects and experiences?" These questions will be addressed in this unit. Let us start by looking at why it is necessary to design a school-based curriculum.

Reasons for Designing a School Curriculum

As you are already aware, a school serves the needs of the child. All that is done by the school should be for the good of the child. You as a teacher should not lose sight of this fact. The school is established to improve the community, the environment and the lives of the learners. It therefore becomes the responsibility of the school to develop the following:

- the capacity of the learner
- the manipulative skills of the learner
- the attitudes and value systems of the learner.

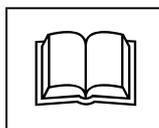
If the school fulfils these three responsibilities, a learner will be able to display new behaviours. A school curriculum should help all learners to develop their mental capacity, acquire manipulative or technical skills and develop their emotional state. To accomplish these goals, the school curriculum must meet certain demands.



Self-Assessment 1

What is a school curriculum?

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



Factors That Influence a School-Based Curriculum Design

Assuming that the school curriculum developers design their curriculum with the child in mind, there are a number of factors that they need to consider. These are described below.

National Goals of Education

Learning in any country is guided by its national goals and philosophy. These are influenced by political considerations to ensure national identity. Curriculum development can be centralised at the national level or decentralised to the local level.

Number of Subject Options Available

The central pattern of curriculum design is further influenced by the number of subjects in the national curriculum. Normally, a school cannot include on its list a subject that is not on the national curriculum, so the school curriculum is limited to what the national list has to offer.

The Learner

In addition to national goals, the school curriculum is influenced greatly by the mental, physical and emotional requirements of the child. The school curriculum developers look at the child's level of development and maturity. The juniors should be given what they can handle in terms of depth and quantity. For example, in science at the primary level, there is more concern with the systems and processes that affect the learner's life without giving the principles and theories behind them. At higher levels, the physical, chemical and biological systems and processes are described in terms of the principles and theories that explain them. The level of complexity increases as the mental capacity of the learner develops.

Learning experiences increase in intensity and complexity with increased manipulative skills. Thus the physical condition of the learners also influences the selection of subjects and experiences. One cannot teach art appreciation to children in a school for the blind and under normal conditions, one would not teach music to the deaf.

Resource Availability

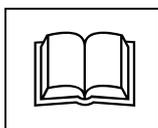
By resources, we are referring to learning facilities, materials and personal factors such as qualification and experience. A school should not select a subject merely because other schools are offering it. A secondary school should not offer computer science if it has no electricity, or opt for rugby if there are no grounds and trainers qualified to coach the sport. The developers must look at the resources that are available before selecting a subject for the school.



Self-Assessment 2

1. What pattern of curriculum design is used in your country? Is it centralised or decentralised? Explain.
2. What considerations about your own learners were taken into account in making the curriculum you are using?

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



Culture of the People Around the School

At a secondary school, it does not make much sense for the Bible to be taught in a Hindu society or the Koran to be taught in a Christian society. In any country, subjects such as

commerce, economics, science and accounting make a lot of sense because they will help the learners to acquire skills needed to produce goods and services. To humanists, it makes sense to include literature, history, science and geography. The content and learning experiences provided by a school should have cultural relevance for its learners.

The School Environment

Planners should consider what the environment could offer to the learner and how the environment can be exploited to facilitate the teaching and learning process. For example, if the school is located in a desert area, you might think of offering a course on crop science and farming in arid environments.

Evaluation System and Strategies

You should also note that the designer of a school curriculum should consider the system and strategy for the evaluation of the curriculum. Practical assessments for certain subjects such as chemistry require special equipment and apparatus that the school might not be able to afford. Learners might be frustrated if they followed a course of study for which they were not assessed, because where there is no assessment, there is no certification. In addition, the instructors teaching these subjects may not take them seriously. Without commitment from both the teacher and the learners, teaching these subjects wastes time and money.

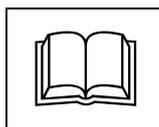
It also would not make much sense to offer a subject in a trade that required industrial testing equipment if the school could not expose the learners to the same environment and conditions found in industry. These examples stress the need to consider evaluation seriously.



Self-Assessment 3

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

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



The Process of School Curriculum Designing

Formulating a school-based curriculum is not different from designing a curriculum in general, which was discussed in Unit 4 of Module 13. The only difference is that content and learning experiences are more localised.

Taba (1962: 12) and other writers suggest that the steps below be followed:

1. Diagnosis of needs

2. Formulation of objectives
3. Selection of content
4. Organisation of content
5. Selection of learning experiences
6. Organisation of learning experiences
7. Determination of what should be evaluated and the means of evaluation.

As you can realise, this is almost the same as the task analysis process referred to in Unit 4 of Module 13. You might be wondering what happens at each stage. Let us examine each stage more closely.

1. Diagnosis of Needs

This is a fact-finding stage in which you assess the needs of society and the available resources. You might need to find answers to the following questions:

- Who are the learners?
- Who are the teachers?
- Why is the programme necessary?
- Where will the programme be implemented?
- How will it be implemented?

The answers to these questions will become the basis for establishing policy or formulating goals.

2. Formulation of Objectives

Once the goals are established, one needs to determine what the outcomes should be. At this stage, the goals are written as statements of intent that describe the behaviours which children are expected to exhibit as a result of studying the curriculum. Once this is done, you must then identify the content.

3. Selection of Content

After the intended outcomes have been determined, for example, to produce children with inquiring minds, you need to select content that will help achieve that objective. Subjects such as science, mathematics and geography may be selected. These subjects are based on inquiry. This stage relates the objectives formulated in the second stage to the subjects available from the national curriculum.

4. Organisation of Content

The third stage is concerned mainly with the identification of content that can be included. At this stage, the identified content is sequentially arranged to correspond to the maturity and development levels of the learners. Related content is also grouped and all possible relationships established. Once

content has been organised, it will be easier to select learning experiences.

5. Selection of Learning Experiences

This stage is concerned with the identification of relevant learning experiences that will enable the learner to understand and appreciate the content. These are identified in any order and put on paper. When all the selected subjects have been reviewed, one then needs to look at sequencing these experiences.

6. Organisation of Learning Experiences

Learning experiences are organised in the same manner in which the content is organised. Identified experiences are arranged according to their complexity. The simple tasks come first and the most complex appear later. This will help the learner to go through the course with ease. At this point, you should be aware that a school must grade content and learning experiences. This is why subject matter is prescribed for each grade, standard or form. These stages determine what should be taught at what level, and how.

After the content and sequence of learning experiences have been determined, evaluation is the final step in the process of designing a school curriculum.

7. Evaluation

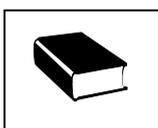
Consideration is made at this stage as to whether the desired outcomes have been met. In order to accomplish this, it is necessary to measure learners' accomplishments and compare them with the objectives identified at the beginning of the curriculum planning process. The results of the evaluation will be used for curriculum improvement.



Self-Assessment 4

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

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



Summary

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

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



Reflection

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



Unit Test

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

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



Suggested Answers

Self-Assessment 1

The answer could include some of the points below.

A school curriculum is:

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

Self-Assessment 2

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

Self-Assessment 3

Your answer could include some of the following points:

Factor	Explanation
<ul style="list-style-type: none">• National goals and subject options available on national list:	<ul style="list-style-type: none">- Give national identity and philosophy.- Address national needs.
<ul style="list-style-type: none">• The learner's physical, mental and emotional state:	<ul style="list-style-type: none">- Physical: consider disabilities, complexity of manipulative skills.- Mental: consider level of maturity and cognitive development.- Emotional state: consider values and attitudes to be developed.

Factor	Explanation
<ul style="list-style-type: none"> • Resource availability: 	<ul style="list-style-type: none"> - Consider the facilities and materials available. - Consider the qualifications, number, experience and level of training of personnel available.
<ul style="list-style-type: none"> • Culture of the learner: 	<ul style="list-style-type: none"> - Consider the religion, beliefs and values of the local people.
<ul style="list-style-type: none"> • Environment of the school: 	<ul style="list-style-type: none"> - Consider what the environment can offer and what can develop the environment.
<ul style="list-style-type: none"> • Evaluation system and strategies: 	<ul style="list-style-type: none"> - Consider how the curriculum is evaluated and whether it will be possible to evaluate effectively in a particular school environment.

Self-Assessment 4

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

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

Unit Test

1. A school is a social institution designed to give formal learning to children.
2. Reasons for designing a school curriculum are:
 - to facilitate the systematic development of the learners' mental capacities,
 - to facilitate the systematic development of the learners' manipulative or psychomotor skills,

- to develop the learners' values and attitudes,
- to meet societal needs, and
- to improve the local environment.

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

UNIT 2: Syllabus Design and Assessment



Introduction

As a teacher, you have used a syllabus to prepare your lessons. Teachers can be more effective in their teaching when they understand and interpret their syllabuses well. This unit discusses the syllabus and its interpretation.

Objectives

After completing this unit, you should be able to:

1. Define a syllabus.
2. Discuss the importance of a syllabus to a teacher.
3. Explain the difference between a syllabus and a curriculum.
4. Describe the important elements of a syllabus.
5. Explain why objectives, concepts and core messages are important.
6. Discuss the function of scheming in the teaching and learning process.
7. Discuss the value of assessment in the teaching and learning process.

Content

This unit will cover the following topics:

- definition and elements of a syllabus
- scheming and its importance in the learning and teaching process
- the functions of evaluation.

What Is a Syllabus?

Generally, a syllabus is defined as “a course of study offered by a learning institution in a specific period of time” (Debin and Olshtain, 1986). Other authorities have considered a syllabus to be a collection of topics on the same subject matter that are required to meet the course objectives. Farrant (1980: 173) defined a syllabus as “a series of statements of what is to be learned”.

For the purposes of this unit, a **syllabus** will be defined as a course outline comprising a collection of topics on the same subject matter and a series of statements of what is to be learned within a given time frame.

A syllabus is a very important document to a practising teacher because it is the basis for the content delivered to the learner. Below are some reasons why it is important to have a syllabus:

- From the syllabus, the teacher can determine what topics are to be taught at each level: class, grade or form.
- The syllabus outlines terminal objectives. It gives the teacher the basis for evaluation, since these objectives specify the expected achievements at the end of the course.
- The syllabus lists concepts to be developed; it tells the teacher what pupils should learn.
- The syllabus outlines the learning experiences and provides notes on the subject to be learned. These help the teacher determine the depth of the content and the expected skills to be developed. The teacher can easily prepare materials needed to deliver lessons.
- The syllabus provides strategies and means of evaluating the learners' understanding of the subject. In some instances, the syllabus may suggest the skills to be evaluated and the weighting of each skill (for example, practical skills 40% and knowledge 60%). The syllabus specifies the number of examination papers and their nature, as in the following:

Three papers will be set in this subject:

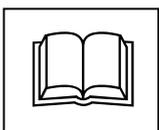
- Paper 1: Theory – multiple-choice questions
- Paper 2: Theory – structured and long-answer questions
- Paper 3: Alternative to practicals



Self-Assessment 1

1. Define the term syllabus.
2. Give at least three reasons why it is important for the teacher to have a syllabus.

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



Difference Between a Syllabus and Curriculum

The two words 'syllabus' and 'curriculum' are often used interchangeably. As a teacher, you should be aware of the differences between them.

Curriculum:

- Contains a broad description of general goals.
- Indicates overall philosophy of education that applies across subjects.
- Reflects national and political trends.

Syllabus:

- Is a more detailed and operational document of teaching and learning elements.
- Translates the philosophy of the curriculum.
- Is a collection of related topics on the same subject.

A syllabus is derived from the curriculum objectives. A curriculum is general, while a syllabus is more specific and focused on one subject. We can now look at some important elements of a syllabus.

Elements of a Syllabus

Before elements of a syllabus are discussed, it is important to note that syllabuses are designed centrally by panels of specialists and teachers with experience in the subject. A number of consultations are done before the final document is produced. Panellists are given assignments that must be completed before they are reviewed and discussed. When the panels finally produce a document, a lot of effort will have gone into it. This is why the syllabus is able to guide and inform teachers in schools.

The common elements found in most types of the syllabus are described below.

- **Course Objectives** outline the learning that pupils should be able to demonstrate at the end of the course. Generally, these objectives concern themselves with the skills, knowledge and attitudes that are to be developed. They are subject-specific, unlike those in the curriculum.
- **Course Content.** In each subject area, there are certain topics that should be included at each level. These topics are listed so that the teacher knows which subject matter to teach and the level at which to teach it.
- **Methods of Evaluation.** This indicates the means and strategies of evaluation, the skills to be evaluated and the number of test papers, including the nature of the papers.

While formats are given in syllabuses, they normally differ from subject to subject. When a school receives the syllabus, the document is interpreted and divided into topics to be taught each term. The grouping of these topics depends on:

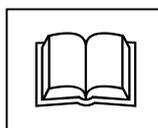
- **Complexity of concept within each topic.** Topics with simple concepts are taught before more complex ones.
- **Relatedness of topics.** Topics that are related should come together but be sequentially ordered.
- **Seasons of the year.** Certain topics are best taught during wet or dry seasons. The weather will determine the term in which certain topics are taught. For example, it is most effective to teach about floods during the rainy season and about photosynthesis in biology when the leaves are green.



Self-Assessment 2

Identify three basic elements of a syllabus and briefly explain their purpose.

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



Scheming

Once the school syllabus is ready, each teacher will be asked to draft a scheme of work.

Though you have made and used a scheme of work, let us briefly discuss it.

Generally a **scheme** is a breakdown of topics into teaching units that are sequentially arranged to facilitate teaching. There are different formats used, depending on the conventions in each school, but all generally include the date, topic, objectives, activities, resources to be used and assignments and evaluation, both general and individual.

There is also a **scheme-cum-plan**. This type of scheming combines the scheme and the planning of the lessons. This document should be detailed so that anyone can follow it. At this point, it is necessary to review important terms such as 'concepts', 'core messages' or 'major understandings', 'terminal objectives' and 'enabling objectives', as they are generally used during scheming.

Concepts. Wilson, Robeck and Michael (1974: 238) define a concept as "a generalised idea of a group of a class of things". A concept is an abstraction; it does not make relationships explicit. An example of a concept in science is 'states of matter'. In mathematics, you can look at 'addition' and in sociology 'change'. These need to be qualified further. To do this, core messages or major understandings are used.

Core messages or major understandings. These are statements that make relationships explicit. They relate ideas so that their meaning is understood. Using concepts cited above, these examples can be drawn:

States of matter. As a core message, you can have ‘a change in the states of matter’. You can now build meaning of movement from one to the other.

Change. In sociology, you can have the core message ‘resistance to change’.

To derive meaning from concepts, core messages or major understandings need to be built. Many people, however, have taken core messages to be concepts. In teaching, if you present the core message, then the learners will benefit. However, note that teaching and learning are related but independent processes. Although a teacher may facilitate learning, the learner is responsible for his or her learning.

Objectives. An objective is defined as an intent communicated by a statement describing a proposed change in the learner (Mager, 1992). In this unit, an objective is a statement of what the learner will do as an outcome of instruction and a statement of change in the behaviour of the learner as a result of the instruction or training. Objectives generally are written in terms of the learner’s performance or behaviour.

Objectives may be classified as terminal or enabling.

- **Terminal objectives** are statements of intent regarding the learner’s achievement at the conclusion of a unit of instruction. Such statements are derived from the content of the unit.
- **Enabling objectives** are statements of intent that make it possible for the learner to arrive at the terminal behaviour. In other words, an enabling objective is a sub-terminal objective.

Also note that learning objectives must be **‘SMART’**:

- **S**pecific
- **M**easurable
- **A**chievable
- **R**ealistic/Result-oriented
- **T**ime framed

Objectives are specified because:

- they enable the teacher to select learning materials and teaching methods,

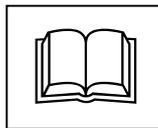
- they guide the teacher in creating the learning environment in which objectives can be accomplished, and
- they show learners what is expected of them.



Self-Assessment 3

1. Outline elements that should be included in a scheme of work.
2. Define 'concept' and 'objective'.
3. What does the acronym SMART stand for?

Possible answers are provided at the end of this unit.



Evaluation

After the teacher has sequenced the topics, outlined the concepts, specified the learning objectives, identified activities and materials to be used and taught the lesson, it is important to determine whether the instructional and learning intentions have been met. The teacher needs to prepare some means of evaluating materials, learners and methods used in teaching. Evaluation strategies should be specified when the teacher is drafting the scheme of work.

Instruments in the form of self-evaluations, self-assessments and practice activities should be prepared. Normally these are referred to as exercises, homework and tests. In the scheme of work, the teacher should indicate when each type of assessment is given. Guided by the objectives given, it should be easy to make these tests and exercises by basing them on intended outcomes.

A record of what happens during teaching should be written under the assessment and evaluation column in the scheme book. Continuous assessment gives the teacher a clear picture of the progress the learners are making. This is very important in teaching



Self-Assessment 4

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

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



Summary

A syllabus is an important document for both the teacher and the learner. This document identifies course objectives and content, as well as the means for evaluating the outcomes of

instruction. Scheming and its uses were also discussed in this unit.

Now that you are ready to face the learner, the next unit will look at timetabling, which brings you and the learner together.



Reflection

Look at your scheme of work. Do you have SMART objectives? Do you show learner activities, assignments and methods in your planning?



Unit Test

1. List differences between a syllabus and a curriculum.
2. Explain what you understand by the terms 'terminal objective' and 'enabling objectives'.



Suggested Answers

Self-Assessment 1

The answer to the questions could include the points below.

1. A syllabus is a course of study, a collection of topics on same subject matter and a series of statements of what is to be learned.
2. The syllabus is important because it:
 - guides the teacher on topics and content level,
 - outlines terminal objectives that determine the expected outcomes,
 - outlines learning experiences, and
 - outlines the evaluation strategies and means.

Self-Assessment 2

The basic elements of a syllabus and their purposes are outlined below.

- General aims - provide curriculum philosophy and course goals.
- Course objectives - specify expected achievements in skills, knowledge and attitudes.
- Course content - lists topics to be covered at each level.
- Methods of evaluation - indicate the means and strategies of evaluation.

Self-Assessment 3

Suggested answers could include the points below.

1. The elements to be included in a scheme of work are:
 - date,
 - topic to be taught,
 - objectives,
 - methods and activities,
 - resources or materials to be used, and
 - assignments and evaluation.
2. The definitions are provided below.

A concept is a generalised idea of a group or a class of things. It is an abstraction.

An objective is a statement of intent identifying the proposed or expected outcomes.

3. **SMART** is an acronym that represents desirable characteristics of learning objectives:
- **S**pecific
 - **M**easurable
 - **A**chievable
 - **R**ealistic/Result-oriented
 - **T**ime framed

Self-Assessment 4

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

Unit Test

You could have made the following points in your answers.

1. The definitions and differences between the syllabus and curriculum are outlined below.

Syllabus:

- provides more detail about teaching and learning elements than does the curriculum.
- is a collection of topics on the same subject.
- is a sub-unit of the curriculum.
- translates the philosophy of the curriculum.

Curriculum:

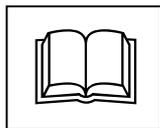
- gives goals which are broader than those in the syllabus.
- gives philosophy across subjects.
- reflects national and political trends.

2. Terminal and enabling objectives are defined below.

Terminal objectives specify learner achievements expected at the end of teaching.

Enabling objectives make it possible for a learner to achieve the terminal objectives.

UNIT 3: Timetable



Introduction

Imagine what would happen in your school if you had no timetable and all the teachers wanted to teach the same class at the same time. Would all the teachers be qualified to teach the same class? Would the learners receive the education they deserved? Would there be adequate resources for each class?

This unit discusses timetabling and its importance for the smooth running of the school.

Objectives

After completing this unit, you should be able to:

1. Discuss the purpose of a timetable in a school.
2. Explain factors that influence timetabling.

Content

This unit will cover the following topics:

- types of timetables and their functions
- considerations in timetabling
- scheme of work and lesson plans.

Types of Timetables

For the purpose of this unit, we will refer to a timetable as a schedule of events that guides school activities throughout the day, week, term or year. For each activity, a timetable generally specifies a starting time and an ending time. In some cases, it indicates who is involved and how the activity will be conducted.

At school, there is a **master timetable** that is prepared by the head and deputy. This timetable shows when the school day begins and ends. It shows the activities for each day. It further shows which teacher will teach which subject to which class, on what day and at what times.

From the master timetable, each department prepares the timetable that should be followed by all the members of the department. This is called a **department timetable**. Each teacher will note his or her own class and subject times from the department timetable and create a class timetable or individual timetable. For primary schools and small secondary schools, class or individual timetables are extracted from the master timetable.

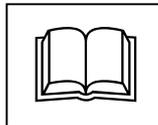
Generally the shortest duration on the timetable is called a period. The length of a teaching period varies from school to school, although the range is normally between 30 minutes and 40 minutes. However, there are schools that use blocks instead of periods. A **block** is used at the tertiary level more than in high schools because the time span is generally an hour or more. Blocks of periods can also be used to teach science, language, literature and practical subjects when more than one period is needed.



Self-Assessment 1

Which types of timetables are generally found in a school and who makes each type?

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



Role of a Timetable in a School

The timetable performs a number of functions in a school. Some of these are discussed below.

Communication

In administration, a timetable is a means of communication for administrators, teachers, students and school staff. Each person is told who does what, when, how and where. All that is needed will be a reminder. Some schools use a bell or siren.

Resource Allocation

A timetable indicates what subject or class should be taught at any given time. The administrator looks at the teachers available and deploys them accordingly. For example, a primary school with four streams at each level from Grade/standard 1-7 may have only 18 qualified teachers. It would make sense to ensure that each level has a qualified teacher. The lower levels and upper levels, whenever possible, should have more qualified teachers where more expertise is needed.

By looking at the timetable, it is possible to determine when learning materials would be needed during the year, term or part of the day. The head would know what materials should be given to which people and at what time. For example, an overhead projector may be needed by Mr Bulawa for his history class and Mr Moyo for his English class. The timetable facilitates the distribution of resources.

Time as a resource must to be adequately and equitably shared, depending on the recommended number of periods. For example, in Zimbabwe, mathematics requires 320 hours as compared to 70 hours for religious education. Each subject should be appropriately fitted on the timetable so that the

instruction is spread over a period of time rather than being crowded into one part of the year or day.

Control

The timetable indicates when an activity should start and when it should end. Teachers plan work to fit the time available. The students are required to do certain activities in specified periods. A student who likes sports will not do sports all day, but other subjects as well. Thus, a timetable restricts or controls the activities occurring within a school.

Accountability

The timetable shows what is to be done, by whom, when and how. If things go well or wrong, it is known who did it, when and where. To the authorities, it justifies the number and responsibilities of teaching staff.

Monitoring Tool

With a timetable, it is easy to monitor events in the school. Teachers can easily plan and monitor their own work and the children's progress. Heads and Ministry of Education authorities can monitor what is happening in their schools. The timetable can indicate what has been taught, who taught it and the learners involved.

Factors That Influence Timetabling

The following are some of the factors that influence timetabling:

The length of the school day determines how many subjects can fit on the timetable. For example, a boarding school can start school at 07:15 hrs and end at 17:30 hrs. It will have more activities fitted on the timetable and can afford to give more time to each period than could a day school which starts at 08:00 hrs and finishes at 15:00 hrs. Timetabling is difficult when a school day is divided into two sessions. The number of hours available for instruction can be greatly restricted in this situation.

The number of required contact hours should also be considered. For example, 320 hours are required to complete a mathematics course at the junior secondary level, while an African language course requires 160 hours. Therefore, there will be more mathematics periods than African language periods on the timetable each week.

The number of teachers in the institution will determine the size of the classes and periods on the timetable. In a secondary school, the timetable indicates the number of subjects and classes each teacher will teach. In primary schools, the number of teachers will determine whether there will be multigrade

(composite) classes or single classes. This affects the way the timetable is produced.

The availability of facilities will determine whether there will be double sessioning or not. If a school has fewer classrooms than classes, the only way to accommodate all the classes is to have more than one session each day. This scheduling solution, however, creates many other problems.

The number of subjects in the curriculum influences timetabling. Schools with a few subjects might have long periods, while schools with a wide curriculum have short periods in order to accommodate all the subjects they offer. Some schools cannot accommodate sporting activities and social clubs on their timetables, while others can do so easily.

Scheming and Planning

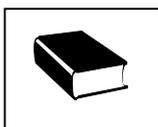
From your experience of scheming and planning as a teacher, you are most likely familiar with indicating times, topics, objectives, methods, teaching aids and activities. In your teaching, a lesson plan indicates the steps to follow, method to use and activities to do with your class. This requires serious and thorough preparation.



Self-Assessment 2

1. Identify any three functions of a timetable in your school.
2. Discuss any two factors that influence timetabling.

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



Summary

For the smooth running of a school, good communication, resource allocation, control and accountability, the timetable plays a central role. A well-prepared timetable will have a significant impact on the teaching and learning process in the classroom.



Reflection

Look at your own timetables for your classes, scheme of work and lesson plans. How much do they guide you in your teaching?



Unit Test

1. What factors influence timetabling?
2. If your school did not have a timetable, what might occur?

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



Suggested Answers

Self-Assessment 1

Below are the different types of timetables and the individuals who make them.

- Master timetable – head and deputy head
- Departmental timetable – heads of departments
- Class or individual timetable – individual teachers.

Self-Assessment 2

Your answer to this activity could include some of the points below.

1. The functions of a timetable are outlined below.

<i>Function</i>	<i>Explanation</i>
Communication	- All stakeholders are informed about what is done, when, where, by whom and at what times.
Resources allocation	- Time is distributed according to the specifications in the syllabus. - Teachers are assigned according to school needs and their experience. - Facilities are scheduled. - Equipment needed for each class is identified.
Control	- Starting and ending times are specified for each activity. - Staff responsibilities are indicated.
Accountability	- Timetables can be used to check on what has been done, when, where and by whom.

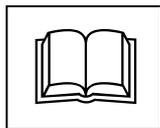
2. Factors that influence timetabling are outlined below.

<i>Factor</i>	<i>Explanation</i>
Time	<ul style="list-style-type: none">- determines the number of activities that can be accommodated in a school day.- determines how often each subject is given, based on the number of contact hours prescribed by the education authorities.
Number of teachers	<ul style="list-style-type: none">- determines class sizes.- determines how many subjects/classes a teacher will teach in a school.
Facilities available	<ul style="list-style-type: none">- determine number of sessions in a school.- determine how learning resources are distributed.
Number of subjects	<ul style="list-style-type: none">- determines size of periods.- determines what other activities can be done in the school.

Unit Test

1. A few of the factors that influence timetabling are listed below.
 - length of school day
 - number of teachers
 - available facilities
 - number of subjects
 - size of school.
2. If the school did not have a timetable:
 - communication within the school would be poor,
 - resources would be allocated inefficiently,
 - there would be lack of control,
 - it would be difficult to determine accountability, and
 - it would be difficult to monitor activities within the school.

UNIT 4: Resource Allocation



Introduction

You have learned about the importance of timetabling in Unit 3. In that unit, you were informed that allocating time to the teaching of subjects in the school curriculum is an activity that enables teachers to interact with students in the process known as teaching.

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

But you may ask:

- What are these resources?
- How do schools access them?
- Who provides them?

This unit will provide some answers to these questions.

Objectives

After completing this unit, you should be able to:

1. Identify sources of various types of resources needed to implement the curriculum.
2. Describe how resources are allocated to various levels of curriculum implementation.
3. Explain why resources are essential in the achievement of national and school educational goals embodied in the curriculum.
4. Assess resource requirements for the subjects or classes you teach.

Content

This unit will cover the following topics:

- definition of resource allocation
- sources of educational resources
- types of educational resources
- resource allocation at the school level.

Definition of Resource Allocation

In order to have a full understanding of this unit, it is important that you are familiar with the meaning of the words 'resources' and 'allocation'. Perhaps you have read and heard about these words, but not in the context of curriculum implementation. Before you relate them to the achievement of curriculum goals and objectives at both national and school levels, we will define them.

Resources are defined by *Longman Dictionary of Contemporary English* as "the means, money, property and skills that are available to someone or an institution for the purpose of achieving specified objectives".

Allocation is derived from the verb allocate, meaning to decide officially that a particular amount of resources be given to or used for a particular purpose.

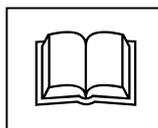
In the context of this unit therefore, **resource allocation** refers to the resources that governments, local authorities and schools make available for the purpose of achieving educational goals and objectives as specified in the curriculum. The ultimate consumers or beneficiaries of these resources are the learners and the society as a whole.



Introductory Activity

List sources of educational resources in your country.

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



Sources of Educational Resources

You should have identified a number of the sources in the exercise you have just completed. Below are a few of the sources of educational resources that schools are likely to use.

Central Government

As you are aware, the central government allocates huge sums of money to the Ministry of Education to use in its mandate of educating the country's children. Other ministries also allocate funds to carry out their own national mandates or responsibilities. The central government allocates financial resources yearly to various ministries in what is popularly known as the 'Budget'.

Ministry of Education

Once the Ministry has received its share of financial resources from the central government, it has to distribute them rationally to its various divisions or departments with specific responsibilities for the implementation of educational goals and objectives. Each division or department in turn allocates its

share to its various components for utilisation, and the process continues until it reaches the teaching and learning experiences at the school and classroom levels.

Local Authority

The local authority can be a recipient of government financial resources and can also generate its own resources and allocate them to schools under its care or jurisdiction. Rural and urban councils are the authorities with this responsibility. The most important resource they allocate to schools is land on which the school buildings and playgrounds are situated. A local authority can also allocate money to individual schools for infrastructural facilities such as classrooms, laboratories, libraries and textbooks. This is done in order to facilitate the teaching and learning process at the school and classroom levels.

The School

The school has many resources at its disposal which it can use in its task of translating centrally planned curriculum goals and objectives into learning activities. Some of the resources a school may have at its disposal include:

- money (school fees, sports fees, levies and government grants)
- time
- physical facilities (classrooms, laboratories, libraries and playgrounds)
- equipment (radios, televisions and computers)
- classroom furnishings (desks, benches and chalkboards)
- teachers
- books (textbooks and exercise books).

A school has to allocate each of these to students in order to realise learning experiences.

Parents

Parents are also a great source of educational resources. In most countries, parents pay fees in order for the school to purchase books and materials needed in the teaching and learning process. In some communities or localities, the parents buy books for their own children.

Parents can also contribute towards the salary of teachers, as is the case in private schools and schools with high fees.

The Teacher

The most important resources teachers have are:

- knowledge,
- skills, and
- time.

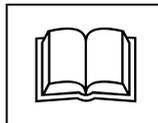
It is the teachers who translate the curriculum goals and objectives of the nation, the community and the school into learning experiences. It is therefore important that they have adequate time and competencies to do so.



Self-Assessment 1

If it is to achieve its objectives, what resources should be at the disposal of the school?

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



Types of Educational Resources

Now that you know the sources of educational resources, it is necessary to classify these resources as:

- financial,
- human, or
- material.

This section of the unit focuses on how the Ministries of Education utilise these resources. We will examine each of them individually.

Financial Resources

In nearly every Southern African Development Community (SADC) country, the allocated funds are used for:

- meeting teachers' and administrators' salaries,
- providing teaching and learning materials to schools through per-capita allocation to every registered student,
- the training and professional development of teachers,
- building tutorial and teacher residential facilities, and
- administration and maintenance of buildings and facilities.

Human Resources

The human resources Ministries of Education have are:

- teachers,
- inspectors, and
- administrators.

It is the quantity and quality of the human resources that determine the quality of teaching and learning. The rational allocation of these to different parts of a country is therefore a central function of the Ministry. The Ministry should ensure that there is some equity in the distribution of qualified and non-qualified teaching and supervisory personnel to regions, districts and schools. This ensures that no one area develops at the expense of the others. The allocation of human resources to regions and schools is as important as the allocation of financial resources.

Material Resources

At the Ministry level, material resources include all the equipment, buildings and even vehicles that are purchased and maintained in order to assist schools in their teaching and learning function. These must also be equitably allocated to regions, districts and schools in order to reduce inequalities and inequities among communities in the society.

Resource Allocation at the School Level

It is at the school that resources from the sources you previously identified interact in order to achieve the educational goals and objectives outlined in the curriculum. The school head must recruit qualified and competent teachers. The deployment of these teachers to subject areas and classes is one form of allocating resources at the school level. The school heads should allocate the time, material and human resources at their disposal for the benefit of all. Failure to competently allocate these resources may result in failure to achieve the curriculum goals and objectives the school is set up to achieve.

Resource Allocation by the Teachers

Teachers also have resources that they can allocate to their students. We identified these resources as time, knowledge and skills. In order for the teaching and learning process to take place effectively, teachers must be able to allocate these resources equitably among their students. The teacher is the last person in the chain to make sure that resources allocated at various levels are utilised for the benefit of the students.

Adequacy of Educational Resources

With the high demand for education throughout the SADC region, educational resources are far from being adequate. Central governments are unable to meet the financial requirements of the Ministries of Education. In turn, Ministries

are unable to meet the requirements of regions and schools. Therefore, at the school level, heads and teachers must manage the resources they have very efficiently in order to achieve the goals of the prescribed curriculum.



Self-Assessment 2

How do Ministries of Education use the financial resources allocated by central governments?

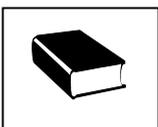
Possible answers to this activity are provided at the end of this unit.



Practice Activity

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

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



Summary

This unit dealt with the concept of resource allocation in the realisation of national and school curriculum goals. It began by defining the concept and then identified the types of resources central governments allocate to the Ministries of Education.

Other sources of educational resources were also identified and discussed. The unit stressed that students are the final consumers or beneficiaries of the resources allocated. Teachers were identified as the resource that translates the intended goals into reality through the teaching and learning process.



Reflection

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



Unit Test

1. What are the resources that teachers can contribute to the education system?
2. How can local authorities help schools to obtain educational resources?
3. Why are educational resources always seen by consumers or users as inadequate?

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



Suggested Answers

Introductory Activity

Sources of educational resources could include the following:

- central government, including Ministries of Education
- communities, including local authorities and school development committees
- school administration
- parents
- teachers.

Self-Assessment 1

The following resources are available to schools:

- teachers
- money
- books
- classrooms
- playgrounds.

Self-Assessment 2

The Ministries of Education use the financial resources to:

- meet salary bills,
- train and develop teachers,
- provide classrooms and other facilities, and
- administer and maintain the schools.

Practice Activity

In the presentation, you could include the following:

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

Unit Test

1. Teachers can contribute knowledge, skills and time.
2. The local authorities can generate their own resources and allocate them to the schools. Local authorities frequently allocate land for buildings and playgrounds, as well as funds to build classrooms.
3. From a consumer's viewpoint, educational resources are never adequate because:
 - they do not meet the demands and needs of the consumer;
 - the central government has to allocate money to other Ministries, such as Health and Defence;
 - parents continue to pay fees related to schooling, and these fees continue to rise; and
 - available resources may not be efficiently managed.

UNIT 5: Delivery Methodologies



Introduction

In Unit 4, you learned how educational resources are allocated to Ministries of Education by central governments for the purpose of implementing national educational goals. We also explained how the school can mobilise resources at its disposal in order to translate curriculum objectives into teaching and learning experiences. The teacher's personal contribution to resource allocation was briefly discussed in Unit 4.

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

Objectives

After completing this unit, you should be able to:

1. Define the terms 'teaching' and 'method'.
2. List a number of teaching methodologies.
3. Describe what is meant by effective teaching.
4. Determine the conditions for delivering a lesson successfully.

Content

This unit will cover the following topics:

- definitions of teaching and methods
- teaching and curriculum implementation
- lesson implementation.

Definitions

As we have done in other units, we will define key words used in this unit.

Teaching

What is your definition of this term? There may be as many definitions of the word as there are teachers. However, Hunter (1984) in Beach and Reinhartz (1980: 123) defines teaching as "the constant stream of professional decisions that affects the probability of learning: decisions that are made and implemented before, during and after interaction with the students".

According to Beach and Reinhartz (1989: 123), teaching is a complex and multidimensional activity. It includes:

- telling
- explaining
- defining
- giving examples
- stressing critical attributes
- modelling
- demonstrating.

Farrant (1980: 168) further defines teaching as “a process that facilitates learning”.

Is your definition similar to any of these?

Method

Collins Reference English Dictionary defines method as “techniques of doing something”, while *Longman Dictionary of Contemporary English* defines it as “a planned way of doing something”.

The two definitions are applicable to teaching as an activity. In this unit, **teaching methodologies** will be taken to refer to those techniques and strategies used by teachers in their efforts to facilitate student learning.

Teaching and Curriculum Implementation

In the preceding units, you learned that teaching is the activity that translates curriculum goals and objectives into experiences that students acquire during their interaction with the teacher. All the resources the government and individuals allocate to education should be effectively and efficiently exploited during this interaction.

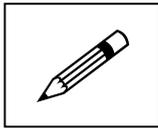
The question you might ask is, “Do students or learners acquire all the experiences and knowledge that the subject content is expected to generate during the interaction?”

The answer to this question is most likely “Yes”, but it could also be “No”, depending on the methodology the teacher uses to achieve lesson objectives. Some methodologies may not be appropriate for certain subjects and certain lesson situations. The methodologies teachers commonly use are:

- lecturing,
- demonstration,
- illustrating,
- experimentation,
- inquiry,
- role playing,

- song and dance,
- observation,
- dramatisation, and
- projects and research.

Learning experiences can take place when one or a combination of these methods are employed by a teacher during a teaching and learning interaction.

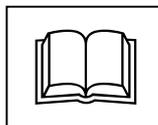


Self-Assessment 1

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

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

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



Lesson Implementation

There is no teaching methodology that, on its own, makes students learn. Methodologies are only approaches that teachers use to capture students' interest and motivate them to learn the information provided.

According to Beach and Reinhartz (1980: 128), the teaching from which students learn the most is one in which the teacher does the following:

- Provides opportunities for students to participate actively and successfully.
- Evaluates and provides feedback on students' progress during instruction.
- Organises materials and students.
- Maximises time for teaching.
- Manages student behaviours.
- Teaches for cognitive, affective and/or psychomotor learning.
- Uses effective communication skills.

Beach and Reinhartz (1980: 128) state that teaching and learning are effective when:

- The teacher presents clear lesson goals and objectives to students.
- The classroom environment is businesslike in nature.
- The subject matter being taught is effectively covered.
- The teacher is flexible in his or her teaching methods, with extra materials, displays and/or resource materials in the classroom.
- The teacher has vigour, energy and is involved with the students.
- The teacher provides students with positive and negative feedback.
- The teacher asks students questions at different levels and adjusts them appropriately as the lesson proceeds.
- The teacher is able to conduct the class without the lesson being interrupted.
- The teacher sets and articulates the learning goals, assesses student progress and makes class presentations, illustrating how to do assigned work.
- The teacher allocates adequate time to cover the material being taught, yet remains flexible enough to allow for the unexpected.
- The teacher maintains a balance between the level of difficulty of the topic being taught and the pace of the lesson.

Conditions for Successful Lesson Delivery

We have discussed the teaching methodologies and what teachers should do during the delivery process. Now you may want to pose this question: What conditions make effective teaching possible? Provide an answer for yourself. Then, consider the following:

- **Conducive teaching and learning environment.** The place where teaching and learning interaction takes place must motivate both the teacher and the learner. A depressing environment creates tension and impedes maximum participation.
- **Availability of appropriate resources.** Resources to teach the specific subject area must be made available to the teacher in sufficient quantities so that all students have an opportunity to use them.
- **Support from supervisors.** Teachers are motivated by support and encouragement from their supervisors. Occasional visits to the classrooms and the provision of

positive feedback encourage teachers to perform even better.

- **Teacher's personality.** Since teachers are the most critical factor in the teaching and learning process, their personal attributes are central to the learning activity. For teachers to capture the attention of all students, they must have the following attributes:
 - *Cleanliness and smartness.* Teachers must be appropriately dressed and presentable. Students should want to emulate them.
 - *Good health.* A sickly teacher definitely demotivates students. It is likely that such a teacher spends most of the time away from the station or classroom. If the teacher is not present on a regular basis, learning activities are frequently disrupted, and the students are unlikely to establish a meaningful rapport with the teacher.
 - *Knowledgeability.* Teachers must be appropriately qualified to teach the subject matter and be thoroughly conversant with the content of the subject being taught. They should know much more than their students.
 - *Gender sensitivity.* The teacher must be aware of gender issues and use a gender-neutral approach.
 - *Respect.* The teacher must respect the opinions and intellectual capabilities of all of the students.



Self-Assessment 2

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

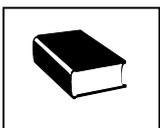
Possible answers to this activity are provided at the end of this unit.



Practice Activity

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

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



Summary

This unit has covered a number of issues which are pertinent to lesson delivery. The topics covered included:

- the definition of teaching,
- the methods or methodologies of teaching,

- the conditions necessary for successful lesson delivery, and
- the attributes of an effective teacher.



Reflection

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



Unit Test

What are the conditions necessary for effective lesson delivery?

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



Suggested Answers

Self-Assessment 1

Your answers may vary from those below.

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

Self-Assessment 2

An effective teacher:

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

Many other answers are possible.

Practice Activity

The teacher should exhibit the following attributes:

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

Unit Test

Conditions necessary for an effective teaching and learning situation are:

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

UNIT 6: Monitoring the School Curriculum



Introduction

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

Objectives

After completing this unit, you should be able to:

1. Define monitoring.
2. Explain why it is important to monitor a school curriculum.
3. Identify and discuss aspects of a school curriculum that should be monitored.

Content

This unit will cover the following topics:

- concept of monitoring
- the importance of monitoring a school curriculum
- aspects of a school curriculum that should be monitored
- monitoring techniques.

Monitoring

As a teacher, you have monitored your students and you have been monitored by your superiors.

In everyday use, the term 'monitor' means to check, to follow, to keep an eye on and to supervise. In this unit, monitoring the curriculum is defined as a process of helping teachers to improve the learning opportunities for the learners (Tanner and Tanner, 1995). **Monitoring** in the educational environment:

- is a process and not an event,
- aims at improving the teacher's skills,
- should result in improved opportunities for the learner, and
- considers all that is involved in the improvement of learning.

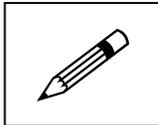
The Importance of Monitoring the School Curriculum

The importance of monitoring the school curriculum cannot be over-emphasised. In the school system, monitoring is done to:

- **help the learners.** Learners will learn if they:
 - maximise the gain from the learning experiences offered to them,
 - sharpen their learning and technical skills,
 - develop knowledge and positive attitudes,
 - understand the content being taught to them,
 - interact with learning materials meaningfully, and
 - develop socially.
- **help the teachers.** Teachers need to:
 - sharpen their teaching skills,
 - improve their delivery methodologies,
 - develop their leadership skills and qualities,
 - improve their relationships among themselves and with learners and supervisors,
 - upgrade themselves professionally and academically,
 - improve their communication skills,
 - be creative and innovative, and
 - ensure goal achievement.
- **help the supervisors,** such as heads of departments, heads of schools and their deputies, inspectors and education officers. These supervisors need to:
 - improve their leadership, communication, observation, professional and technical skills,
 - upgrade themselves professionally and academically,
 - develop their interpersonal skills,
 - be creative and innovative,
 - check on standards, and
 - check on goal achievement.
- **assess learning materials** to ensure they:
 - are user-friendly and relevant to the situation,
 - are adequate and appropriate to the educational level, and
 - are available.

- **assess the teaching methods** to ensure they:
 - meet the level of the learners,
 - are interactive in nature, and
 - are varied and motivating to the learners.
- **assess the curriculum** in order to:
 - improve the relevancy and flexibility of content, and
 - determine if instructional objectives are achievable.

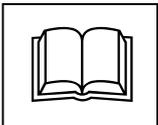
By monitoring the school system and all its components, it is possible to determine what is and what is not working and to suggest appropriate improvements. However, if the outcomes of the monitoring process are not taken seriously, then no change will occur. This would not help students. All efforts must be taken to facilitate student learning.



Self-Assessment 1

Explain how monitoring the school curriculum can help the learner.

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



Aspects to Be Monitored

This section outlines the monitoring of the school timetable, resource allocation, schemes of work, teaching methods, learning activities and evaluation.

The School Timetable

If the school timetable is available, it should be checked for the following:

- the length of the school day
- the activities to be conducted
- the resources available, both human and material
- the number of subjects offered in the school
- the prescribed period for each subject
- the availability of the timetable (Has it been given to all who should have it?).

Generally, timetables are monitored by inspectors and education officers during their routine visits to the schools. If they find anything that needs improvement, the administrators should help the school personnel to improve the timetable.

Resource Allocation

A school needs guidance and checking on how finances are collected and used. Financial management should be

monitored closely to ensure that monies received are accounted for. If school personnel lack financial and administrative skills, appropriate training should be provided.

The quantity and quality of books should also be checked. Frequently, the checking is performed by education advisors and inspectors when they visit schools. The heads of schools can also check the books given to different departments in their schools. There should be an adequate number of books, and they should be distributed fairly. A head of a school may buy a set of books for a class, but there may not be a book for every student. This is not a satisfactory situation. Each learner should have his or her own text. If textbooks are kept in a departmental office and are never used, this is a waste of resources.

Qualifications and training levels of teachers should be checked. The most skilled teachers should be assigned to lower and upper classes in order to give the young students a good foundation and to ensure the learners in upper classes are prepared for employment or additional education.

Scheming and Planning

The subject specialists, including the department heads and inspectors, need to check the level of content schemed and planned, the appropriateness of methods and materials used and the timing of the activities. The organisation of content is checked also for coherence, sequencing, specificity of objectives and suitability of learning activities. These specialists look at the scheme-books and lesson plans. Using their experience, they can guide the teacher on how to produce the best schemes of work and lesson plans. Heads of schools can also supervise schemes and lesson plans.

Lesson Delivery and Teaching Methods

Teaching does not always lead to learning. Smith (1960: 230) defines **teaching** as “a system of action intended to induce learning”. For learning to take place, the teacher must use appropriate and interactive methods. The improvement of teaching methodologies is the responsibility of the supervisors, including the head of department, deputy head, head of school and the education officer or inspector at either the district or provincial level. These supervisors need to observe the teacher in the classroom and note strengths and areas requiring improvement. The teacher and the supervisor will then discuss the progress of the lesson. For maximum benefit to the teacher, the supervisor and the teacher should work together so that they contribute to each other’s development.

Learning Activities

The teacher should make sure that each learner has done what he or she is supposed to do. The learning activities should be monitored in order to ensure that each experience has had the intended effect. The teacher is the person responsible for

assessing and evaluating students' learning on a regular basis. The teacher should give exercises and tests that are corrected or marked immediately and returned to the learner. This interaction establishes what has been learned and what still needs to be taught or reviewed.

Evaluation

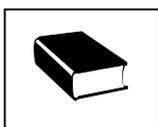
Evaluation methods should be checked to assess their suitability and appropriateness. Their purpose must be clear to the learner, the teacher and society, if the evaluation is to be valid and reliable.



Self-Assessment 2

List four aspects of the school curriculum that are monitored. Discuss any two of them.

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



Summary

The success of any educational activity lies in the strategies used for monitoring the curriculum. Learners, teachers, supervisors, learning materials and methods are improved through monitoring.

In the next unit, we will discuss the evaluation of the school curriculum.



Reflection

As a teacher, think of the last encounter you had with your supervisor. How useful was it to you? Have you made any changes to your teaching methods since the last visit? How successful have these changes been?



Unit Test

1. Who are the beneficiaries of monitoring a school curriculum?
2. What do you understand by monitoring of a school curriculum?
3. What aspects of a school curriculum are monitored?

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



Suggested Answers

Self-Assessment 1

Monitoring of the curriculum ensures that the learner:

- receives maximum gain from learning experiences;
- sharpens learning and technical skills;
- develops intellectually, socially and emotionally;
- interacts with learning materials meaningfully; and
- understands the content being taught.

Self-Assessment 2

Your answer to this activity could include some of the following points:

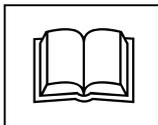
Aspect	Discussion
Timetable	<ul style="list-style-type: none">- length of day and activities- resources available- prescribed time per subject- number of subjects- availability of the timetable
Resource allocation	<ul style="list-style-type: none">- finances, textbooks and personnel
Scheming and planning	<ul style="list-style-type: none">- relevance, appropriateness of content, activities, objectives and organisation of work
Teaching methods	<ul style="list-style-type: none">- relevance- appropriateness, pacing and interactiveness
Learning activities	<ul style="list-style-type: none">- individual learners' progress- level of feedback that is provided

Unit Test

Answers to this activity could include some of the following points:

1. The beneficiaries of monitoring are the learner, the teacher, the supervisors and the society.
2. Monitoring is the process of helping the teacher to improve the learning opportunities for the learner.
3. Aspects of the curriculum that are monitored include:
 - the timetable,
 - the resource allocation,
 - scheming and planning,
 - the teaching methods and lesson delivery,
 - the learning activities, and
 - evaluation.

UNIT 7: School Curriculum Evaluation



Introduction

This final unit in Module 14 describes how the school curriculum can be evaluated. Every teacher should be familiar with the concepts of assessment and evaluation and be able to apply them appropriately. By working through this unit, you will enrich your knowledge and skills as a competent and effective teacher.

Objectives

After completing this unit, you should be able to:

1. Differentiate evaluation from assessment.
2. Explain why the school curriculum should be evaluated.
3. Describe what school curriculum evaluation entails.

Content

This unit will cover the following topics:

- definitions of curriculum and assessment
- reason for evaluating the school curriculum
- aspects of the curriculum that are evaluated
- forms of evaluation.

Definitions

As in other units, it is necessary that the concepts we are discussing be defined and put into context. This will help you to understand and apply the concepts in your own context. Definitions will be given for 'school curriculum evaluation' and 'assessment'.

School Curriculum Evaluation

This refers to the efforts a school may make to determine the extent to which it achieves the objectives of the syllabuses it teaches. The evaluation may involve all subjects or may be directed at certain subject areas only as the need may arise. It focuses on whether the national and school curriculum objectives are being translated into learning experiences during the teacher-student classroom interaction.

Assessment

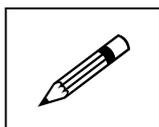
In assessment, students are required to perform some act such as conduct experiments, draw pictures, perform and so forth.

Assessment determines the students' knowledge and skills output (Urevbu, 1985: 77).

Why Evaluate the School Curriculum?

The school is the 'pot' in which the curriculum objectives of a nation or a community are processed. All that takes place in a school has some impact on the society in which students live and will work. It is therefore necessary to investigate whether the resources allocated by the central government for educational purposes are being used to achieve the intended outcomes.

In addition to governments, other stakeholders who invest considerably in education at the school level also need to know whether children actually learn during their stay at the school. The only way to objectively discover what occurs at a school is to evaluate its objectives, content, processes and outputs (Gatawa 1990: 55). In other words, the school is evaluated in order to determine how it is succeeding at educating students. In order to determine how a school performs in its endeavours, it is necessary to compare it with schools of its own status in terms of human and material resource allocation.



Self-Assessment 1

Why is the school curriculum evaluated?

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



What Is Evaluated?

According to Gatawa (1990), the following should be used as the basis for establishing the criteria for evaluating school curriculum.

- objectives
- content as outlined in the syllabuses
- materials
- process or methodology used by teachers and administrators.

The following questions must be raised when evaluating objectives (Gatawa, 1990):

- Are they worthwhile?
- How do specified objectives compare with possible objectives?
- Can they be achieved?
- Can they be accepted by teachers?
- What are the expected outcomes?

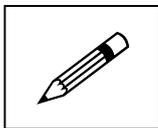
With regards to content, Gatawa (1990) says evaluation should focus on:

- its suitability, and
- its correlation with the specified objectives.

Materials are evaluated in order to determine whether they are:

- simple to use,
- easy to produce, and
- cost-effective.

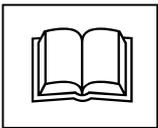
The instructional methodology and administrative processes must be evaluated to determine whether they are consistent with the objectives or if the processes employed assist and support the teachers.



Self-Assessment 2

What are the major areas that are evaluated at the school level?

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



Who Evaluates the Curriculum?

The curriculum can be evaluated by a hired professional evaluator, a consultant or qualified personnel from the Ministry of Education. Whether it is a consultant or Ministry personnel, the evaluator should be:

- an educator;
- competent in statistics, methods of observation, constructing questionnaires and conducting interviews;
- confident, precise and able to communicate effectively; and
- able to create a conducive working atmosphere with assistants (Gatawa, 1990).

If a curriculum evaluation is to be successful at the school level, it must receive the support of the community, management, staff and students of the school.

Forms of Evaluation

There are two forms of evaluation:

- formative evaluation
- summative evaluation.

With regards to the evaluation of the school curriculum, **formative evaluation** is the process of looking for strengths

and weaknesses in the content, materials and methodology as the evaluation process unfolds. Weaknesses are attended to before the whole process is completed.

Summative evaluation is conducted at the end of an activity. Its purpose is to ensure that the necessary processes have been carried out and that the objectives of the curriculum are being met.



Self-Assessment 3

What qualities should a curriculum evaluator have?

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



Practice Activity

You have been identified as one of the teachers to participate in a curriculum evaluation exercise at a neighbouring school. How would you prepare for it?

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



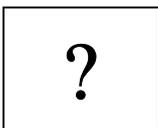
Summary

In this unit, we discussed the evaluation of the school curriculum. You learned why we evaluate the school curriculum, what is to be evaluated and who should conduct the evaluation. The unit ended by discussing the functions of formative evaluation and summative evaluation relative to the school curriculum.



Reflection

Think about the teaching and learning activities at your school. Which subject or course of study do you think needs to be evaluated and why?



Unit Test

1. Why should a school curriculum be evaluated?
2. What should be evaluated?

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



Suggested Answers

Self-Assessment 1

The school curriculum is evaluated in order to determine whether the curriculum objectives are being achieved. Resources should also be assessed for adequacy, appropriateness and availability.

Self-Assessment 2

Evaluation at the school level should focus on:

- the curriculum objectives,
- the content as outlined in the syllabuses,
- materials used in teaching, and
- the methodology used in teaching.

Self-Assessment 3

A curriculum evaluator should be:

- competent in statistics and research methods;
- confident, precise and able to communicate effectively; and
- able to create a conducive working climate.

Practice Activity

You could prepare for the evaluation exercise by gathering information on:

- the subjects offered at the school,
- the syllabuses that are relevant to the subjects being taught.
- the available resources,
- the number and qualification of teachers,
- the enrolment of the school, and
- the school timetable.

Unit Test

1. The school curriculum should be evaluated in order to determine the extent to which the resources allocated to education are being used to achieve:
 - the intended outcomes,
 - compliance with national objectives,
 - equitable deployment of qualified teachers, and

- effective supervision and monitoring system.
2. The following should be evaluated at the school level:
- the objectives
 - content as outlined in the syllabuses
 - materials
 - methodologies and processes.

Module Test

1. Why do schools need a curriculum? How does society benefit from a school curriculum?
2. Outline the process to be followed in developing a school curriculum.
3.
 - a. Discuss the importance of a syllabus to a teacher.
 - b. How does a syllabus differ from a curriculum?
4.
 - a. A learning objective should be SMART. What does each letter stand for?
 - b. Why, in your opinion, should learning objectives be specific?
 - c. Write a SMART objective for each of the following domains of learning: cognitive, affective and psychomotor.
5. Why is a timetable such an important element in the running of a school?
6. What are the factors that influence timetabling? Discuss in detail any three of these factors.
7. Enumerate the resources your school needs in order to implement the school curriculum effectively.
8. Which are the main sources of educational resources in your country?
9. List and give examples of five factors that facilitate effective learning.
10.
 - a. Why is a teacher's personality important?
 - b. What characteristics of an effective teacher are most likely to facilitate learning? Why?
11. In which ways do students and teachers benefit from the curriculum monitoring process?
12. What is a formative evaluation? How does it differ from a summative evaluation?

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