

CURRICULUM AND SUSTAINABLE LEARNING

Vade Mecum for Teacher Education

**OSUJI GREGORY EKENE, FMS
EVERLYN A. OLUOCH-SULEH**

CURRICULUM AND SUSTAINABLE LEARNING
Vade Mecum for Teacher Education

© 2017 OSUJI GREGORY EKENE, FMS
EVERLYN A. OLUOCH-SULEH

All rights reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, magnetic tape, mechanical, photocopying, recording or otherwise, without prior permission in writing from the author.

Editor: Sewe-K'Ahenda
Cover & Layout: Norberto Ashiona

ISBN

Published by:
CUEA PRESS
The Catholic University of Eastern Africa
P.O. Box 62157, 00200 City Square
Nairobi-Kenya
E: publications@cuea.edu
W: www.cuea.edu

Contents

List of Tables.....	vii
Abbreviations and Acronyms.....	viii
Dedication.....	ix
Foreword	xi
Acknowledgements.....	xv

PART ONE

CURRICULUM DEVELOPMENT

Design, Implementation, and Evaluation

Chapter One

Meaning and Nature of Curriculum	3
--	---

Chapter Two

Foundations of Curriculum	17
---------------------------------	----

Chapter Three

Curriculum Theory	33
-------------------------	----

Chapter Four

Curriculum Planning.....	37
--------------------------	----

Chapter Five

Curriculum Development.....	42
-----------------------------	----

Chapter Six

Curriculum Design.....	53
------------------------	----

Chapter Seven

Curriculum Organisation	61
-------------------------------	----

Chapter Eight

Curriculum Implementation.....	67
--------------------------------	----

Chapter Nine

Educational Resources in Curriculum	73
---	----

Chapter Ten

Curriculum Evaluation.....	77
----------------------------	----

Chapter Eleven

Curriculum Change and Innovation	94
--	----

PART TWO**CHRISTIAN EDUCATION****Patristic And Marist Education,****Marist Education Style, and Sustenance of Marist Pedagogy****Chapter Twelve**

Patristic and Marist Education.....	107
-------------------------------------	-----

Chapter Thirteen

Evolution of Marist Education	111
-------------------------------------	-----

Chapter Fourteen

Style of Marist Education.....	116
--------------------------------	-----

Chapter Fifteen

Marist Boarding Schools	123
-------------------------------	-----

Chapter Sixteen

Sustenance of Marist Pedagogy	128
-------------------------------------	-----

PART THREE

EDUCATION FOR SUSTAINABLE DEVELOPMENT

Classroom Interaction, Cultural Reasoning and Scaffolding Activities, and Sustainable Learning

Chapter Seventeen

Classroom Interaction	137
-----------------------------	-----

Chapter Eighteen

Maximising Input and Involvement	142
--	-----

Chapter Nineteen

Cultural Reasoning and Classroom Scaffolding Activities	153
---	-----

Chapter Twenty

Sustainable Learning	160
----------------------------	-----

Epilogue	169
----------------	-----

References	171
------------------	-----

LIST OF TABLES

Table 1: Assessment Instruments and the Learning Domain Assessed

Table 2: First Marist Brothers' Schools

List of Figures

Figure 1: Elements of Curriculum

Figure 2: Relationship between Elements and Dimensions of Curriculum

Figure 3: Foundations of Curriculum

Figure 4: Ralph Tyler's Linear Model of Curriculum Development

Figure 5: Wheeler's Cyclical Model

Figure 6: Interaction Model

Figure 7: Vertical Relationship of Learning

Figure 8: Horizontal Relationship of Learning

Figure 9: Vertical and Horizontal Relationship of Learning

Figure 10: Ralph Tyler's Curriculum Evaluation Model

Figure 11: Stake's Curriculum Evaluation Model

Figure 12: Stufflebeam's CIPP Curriculum Evaluation Model

Figure 13: Research, Development and Diffusion Model

ABBREVIATIONS AND ACRONYMS

ATO	Antecedent, Transactions, and Outcomes
CIPP	Context, Input, Process, and Product
CON	Curriculum Organisation of Nigeria
CUE	Commission for University Education (Kenya)
DVD	Digital Video
EFL	English as a Foreign Language
ICTs	Information and Communications Technologies
IWBs	Interactive White Boards
KCSE	Kenya Certificate of Secondary Education
KNUT	Kenya National Union of Teachers
NECO	National Examinations Council
NERDC	Nigerian Research and Development Council
NUC	National Universities Commission (Nigeria)
NUT	Nigeria Union of Teachers
SMS	Short Message Service
St.	Saint
TESOL	Teaching English to Speakers of Other Languages
TV	Television
RDD	Research, Development, and Diffusion
WAEC	West African Examinations Council

DEDICATION

We dedicate this work to our learners, and to our biological and religious families. More so, to all who are committed in practical pedagogies that enhance the sustainable development of the society.

FOREWORD

Since ancient times the world over, each society has had its own way of passing on information to its generations. The content has been based on the societal norms and expectations of the growing individuals. The content and mode of delivery has been unique in every society. These ways, modes, content, designs, trainees, etc. are all inclusive in a curriculum.

In traditional Africa, for example, when children are born, they are under the direct care of their parents and extended family members. When they are in their childhood stage, the girls remain under the care and supervision of the mother and grandmother, and the boys under the direct care and training of their fathers and to some extent, their grandfathers. When they are teenagers or adolescents, the communities organise somewhat formal trainings for the girls and boys separately.

Some communities, for example, circumcise their boys and give them formal training in seclusion from the society for a number of designated weeks or months. These boys (initiates) learn the community's norms, cultural practices, and instructions on how to behave as responsible and respectable adult members of the society. The girls also go through their own programme. When the girls get married, they would be under the care of the mother-in-law who would train them on how to fit in the new status and family. Other village women will also train this young woman on how to fit in her new home. All these training would be considered the traditional curriculum for the traditional African man or woman. Learning for the community members was therefore through experience, observation, instruction and through participation of family and community activities.

Today, life has changed; for example, Africans have been acculturated due to exposure to the Western and other world cultures, formal education, modern technologies among others. Education for the children and the youth has shifted from traditional styles to formal school system. As a result, the learners are now exposed to new a curriculum that has changed their way of life, their thinking and ultimately their behaviour. It is therefore expedient to expose them to the kind of curriculum that will mould them and give them holistic education that will help them influence the society positively and fit appropriately in the global village.

The authors of this book have gone through great strides to provide the reader with insights into curriculum issues and their pragmatic nature. The first part of this book gives an exposition of the various kinds of curricula that exist in today's formal education system and how to determine which one best suits an institution or society. It looks at the various facets of curriculum needful in formal education system such as meanings, foundations, theories, planning, developments, designs, organization, implementations, educational resources, evaluation and how to handle change and innovation in curriculum. It is expedient for any curriculum planner, executor or player to understand these facets for effective learning to take place.

The second part of this book explains the need to include godly principles in school curriculum. Recognising that God is the master planner and creator of the universe and needs to be worshipped is key to the development of a school curriculum. The curriculum developers, teachers and learners alike need to understand this concept and execute in a manner that reflects the biblical values intended for holistic learning to take place. Since the human being is in need of God, helping learners to experience this spiritual connection offers holistic education that will ensure sustainable learning in the right direction for life. This second part

recommends the Marist and Patristic approaches to learning for this experience to be realised.

The kind of curriculum development for a given institution needs to be practical, relevant and sustainable. Education needs to be geared towards sustainable development. Offering education that aids learners to acquire a certificate without certified learners being able to translate the knowledge learnt into practical use is wanting. An education system and its curriculum need to be transformative, sustainable and relevant to the society. In Part Three of this book, the authors give useful, relevant and appropriate explanations for such a curriculum. This is certainly a book worth reading, applying and having in the shelves of every educational and learning institution.

Dr. Florence N. Miya, PhD
Education and Music Consultant
Nairobi, Kenya

ACKNOWLEDGEMENTS

God has been for us the source of strength, knowledge, wisdom and understanding. We thank him immensely for the gifts he has bestowed on us. He is really our Divine Providence, and our point of departure in this work. We are deeply indebted to Dr. Florence N. Miya, the Director of Almond Musical Arts School (AMAS) Nairobi, Kenya, who wrote the foreword of this book.

To the biological and religious families of Br. Ekene, we cannot thank you enough for your constant encouragement and support. To his late father Mr Benedict Ahamefule Osuji, and his mother Mrs Josephine Onyemaonyeuba Osuji, we appreciate your parental role in the early formation he received from the family. To his siblings, thanks a lot for being supportive in his educational pursuit. To the Marist Brothers of the Schools (Catholic Mission), Province of Nigeria, thanks a lot for your financial and moral support.

To the family of Dr. Everlyn, especially her husband, Dr. Andrew Juma Suleh, and her children Dorothy Aluoch Suleh, Dr. Audrey Atieno Suleh, and Gerald Odhiambo Suleh, thanks a lot for your encouragement and support during this endeavour. Her siblings were also a great source of encouragement. We also thank her late parents George Oluoch and Petronilla Oluoch for giving her the gift of education.

To the staff and learners of Marist International University College – a Constituent College of the Catholic University of Eastern Africa, Nairobi, Kenya – thanks a lot for the opportunity of sharing knowledge together.

We equally appreciate the support of many other unnamed people who contributed to the success of this book. We ask the God of goodness to bless you abundantly.



PART ONE

CURRICULUM DEVELOPMENT

Design, Implementation, And Evaluation

CHAPTER ONE

MEANING AND NATURE OF CURRICULUM

Concept of Education

Many a time, people find it difficult to define the term education because we learn on daily basis from people and things around us. Some people tend to look at education as attendance at school whereby a teacher is seen as offering assistance to a learner in the classroom. Leading out the goodness in humanity and creating an environment conducive to the formation of the learner – and transformation of the society – need to be the focus of education.

Many scholars have come up with the definition of education, as in the examples below.

- i. Education is the aggregate of all the processes by which a child or young adult develops the abilities, attitudes and other forms of behaviour which are of positive value to the society in which he lives (Fafunwa, 1974).
- ii. Education is the process by which young people acquire the cultural heritage, knowledge, ideals and the civilization of the past so as to be able to take part in the civilization of the present and help build the civilization of the future (Yoloye, 1980).
- iii. Education is the process of acquiring and developing desired knowledge, skills and attitudes (Oluoch, 1984).
- iv. Education is a systematic training and instruction designed to transmit knowledge and develop skills in individuals (Ughamadu, 1992).

Here, the list of the definition of education continues. However, drawing from the above definitions, we can emphatically define education *as a systematic process whereby the society helps a learner to acquire sustainable knowledge, skills, values and positive attitudes for the formation of the heart and the transformation of the society*. It is necessary for Education to lead its informative, formative, and transformative roles in the learner. Informative role is where education helps the learner to acquire desired knowledge and skills. Formative role is where education enables the learner to acquire values and positive attitudes to life. Furthermore, transformative role is where education leads the learner to bring development to the society.

Contributing to the discussion of the concept of education, Ukeje (1979) noted that there are three major ways of defining the term education, namely:

- i. As a Process
- ii. As a Product
- iii. As a Discipline.

As a *process*, education is the means by which individuals acquire the civilization of the past and are enabled both to take part in the civilization of the present and make the civilization of the future. From this, education is thus a process of transmitting, preserving, developing and advancing the culture of a people. As a *product*, education means change in behaviour. Thus, being educated means having a positive change in behaviour. As a *discipline*, education is a body of organised knowledge that deals with the following questions: What should be taught? Why should it be taught? How should it be taught? To whom should it be taught?

Analysis of the above questions indicate that the 'What' refers to the CURRICULUM; the 'Why' refers to EDUCATIONAL PHILOSOPHY; the 'How' refers to METHODOLOGY and the 'Whom' refers to the LEARNER.

Definition of Curriculum

There is no universally accepted or precise definition of the term curriculum. The term has been associated with several meanings and a number of different definitions of it have been proposed. The word ‘curriculum’ is derived from the Latin word ‘curus’, a noun which means ‘racecourse’ or ‘racetrack’ through which a competitor runs in order to reach a desired destination to win a prize. Over the years, curriculum gradually came to mean a course of study followed in a school (Obasi, 2009).

The following are some of the definitions of curriculum by different scholars.

- i. Curriculum is the series of things which children and youths must do and experience by way of developing abilities to do things that make up the adult life (Bobbitt, 1918).
- ii. Curriculum is all of the learning of learners which is planned by and directed by the school to attain its educational goals (Tyler, 1949).
- iii. Curriculum is all the learning which is planned and guided by the school, whether it is carried on in groups or individually, inside or outside the school (Kerr, 1968).
- iv. Curriculum is the planned and guided learning experiences and intended learning outcomes, formulated through the systematic reconstruction of knowledge and experience, under the auspices of the school, for the learner’s continuous and wilful growth in personal-social competence (Tanner & Tanner, 1975).
- v. Curriculum is all of the experiences that individual learners have in a programme of education whose purpose is to achieve broad goals and related specific objectives which are planned in terms of a framework of theory and research or past and present professional practice (Hass, 1983).

- vi. Curriculum is all that is planned to enable the learners acquire and develop the desired knowledge, skills and attitudes (Oluoch, 1984).
- vii. Curriculum is the set of broad decisions about what is taught and how it is taught, that determines the general frame work within which lessons are planned and learning takes place (Farrant, 1988).
- viii. Curriculum is all that is planned and organized to enable learners acquire and develop desired knowledge, skills, attitudes and values for use in an ever-changing society (Kamau & Changilwa, 2013).

With regard to the definitions above and that of education therefore, we can summarily say that: *Curriculum is defined as all planned and unplanned learning experiences of the learner under the auspices of the school and the society, which enables him or her to acquire sustainable knowledge, skills, values and positive attitudes for the formation of the heart and the transformation of the society.*

Types of Curriculum

With the varying conceptions of curriculum highlighted, and the critical analysis of some definitions of curriculum made, let us now look at some types of curriculum. The following are the types of curriculum.

Official Curriculum

This refers to all the learning experiences planned for learners. It is what curriculum designers planned for effective learning outcomes in schools. Taking geography, for example, all the planned learning experiences as contained in the official document sent to the schools become the official curriculum.

Actual Curriculum

This refers to what is covered in practice. It is the reality of the planned learning experiences of the learner implemented in schools. Using the geography curriculum as another example, actual curriculum simply means teaching every topic or covering all contents of the curriculum.

Achieved Curriculum

This refers to the learning outcomes that the learners have been able to grasp as a result of the implemented curriculum. In effect, it simply means the attainment of the goal and objectives of the curriculum by the end of the programme.

Hidden Curriculum

This refers to those things which learners learn at school because of the way in which the work of the school is planned and organized but which are not in themselves overtly included in the planning or even the consciousness of those responsible for the school arrangements. Social roles, sex roles and attitudes to different aspects of living, for example, are learnt by learners in this way. In the context of hidden curriculum, issues are not taught. This untaught and unplanned aspect is what is called hidden curriculum. Teachers can unconsciously play roles which learners can model.

Formal Curriculum

This refers to all the activities for which the school timetable allocates specific periods of teaching time. It simply means activities included in the programme of work to be covered in normal school scheduled hours.

Informal Curriculum

This refers to the activities that go on, usually on a voluntary basis, at break periods, meal times, at the end of school hours, weekends or even holidays. These activities include sports, clubs, and field trips, just to mention a few. They are often referred to as co-curricular activities.

Elements of Curriculum

Elements of curriculum refer to the essential parts of the curriculum. In other words, they are the salient features of the curriculum that give the curriculum its meaning. They are as follows:

- i. Objectives (Intended learning outcomes)
- ii. Content (Subject matter)
- iii. Learning Experiences (Planned and guided teaching and learning interaction)
- iv. Evaluation (A process of ascertaining whether the objectives have been achieved).

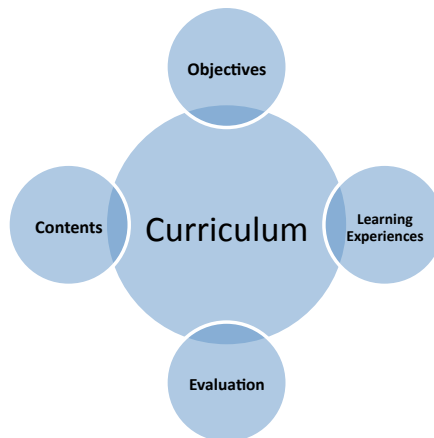


Figure 1: Elements of Curriculum

Objectives

These are the expected behavioural changes in learners. Objectives simply mean specific results that a learner attempts to achieve within a specific timeframe and with the available educational resources. They represent the kind of changes in behaviour that the school seeks to bring about. It is important for the curriculum developers to know that is expected since:

- i. this determines how it will be implemented in schools
- ii. the curriculum should be consistent with educational aims of the given country
- iii. the government takes full responsibility for what happens to the curriculum.

Content (Subject matter)

This refers to everything that is to be learnt in school that can enable the learner to be informed, formed and transformed. All the topics mapped out in the curriculum of every subject in school make up the content. Curriculum content is divided into bodies of knowledge, the desired attitudes, values, and skills. Curriculum content must be planned in such a way that it addresses the concerns of the learner and the society. It must be ready to bring solution to the problems affecting the society which uses it.

Learning Experiences

These refer to the interaction between learners and the external environment. The external environment includes people and facilities that provide for useful interaction, i.e. what the learner has to interact with: content, teachers, and resources, just to mention a few. The learner here is an active participant in the learning process and hence the most effective means of education are the experi-

ences provided and not merely the things the learner is exposed to.

Evaluation

Monitoring of learning achievements in learners involves the processes of testing, measurement, assessment and evaluation (Azuka, 2014). Evaluation is the process of determining the extent to which curriculum objectives are being achieved. It is simply a systematic process of determining the extent to which the learners have achieved the stated instructional objectives.

Dimensions of Curriculum

The school curriculum has four main dimensions. These dimensions of curriculum are very vital to the holistic formation of the learner in a well-developed and balanced manner. They try to address the cognitive, affective, and psychomotor domains of learning. According to Kamau and Changilwa (2013), the dimensions of curriculum refer to how the curriculum is expressed or made. The four main dimensions of curriculum are as follows:

Formal Dimension

This is the structured or planned activities taken formally in the classroom on a regular basis and is prescribed in the syllabus. The activities could be undertaken inside or outside the classroom or even outside the school, but are undertaken by the learners formally. Formal dimension looks at the regular school subjects prescribed in the syllabus and presented to various class levels based mainly on age, for example, teaching a particular subject such as Kiswahili, Igbo, English or geography at a particular time for a particular purpose. This formal dimension is characterised by:

- a) It is a specified course of study.
- b) It is designed for an identified group of learners.

- c) It is to be studied within a given time frame.
- d) It is based on syllabi recommended by the Ministry of Education.

Non-formal Dimension

These are activities such as games, athletics, clubs, societies, school assembly, compound cleaning, excursions, recollections and retreats.. Non-formal dimension refers to the activities that are organized in a less rigid manner. They are organized based on learners' abilities, interests, aptitudes and chronological age. These activities are not restricted to any class level. Traditionally, they were referred to as extra-curricular activities but are now referred to as co-curricular activities. This implies that they complement the formal curriculum. Here, evaluation is done in a non-formal way.

Informal Dimension

These are unplanned, unconscious or indirect activities learners go through as a result of interaction with the school environment. They are not included in the course of study but they influence learner behaviour, e.g. imitation and identification with teachers, peers, culture, new models, or influence of school rules. Such activities aim at character building and moral formation of the learner.

Emerging Dimension

This refers to the unplanned learning opportunities which constantly occur in a school for learning the societal values. The occurrences of these emerging opportunities should be anticipated, and should be taken full advantage of in school. These are activities like sports days in school, parents-teachers day, speech day, graduation day, tree planting day, entertainments, national celebrations, or prize-giving days.

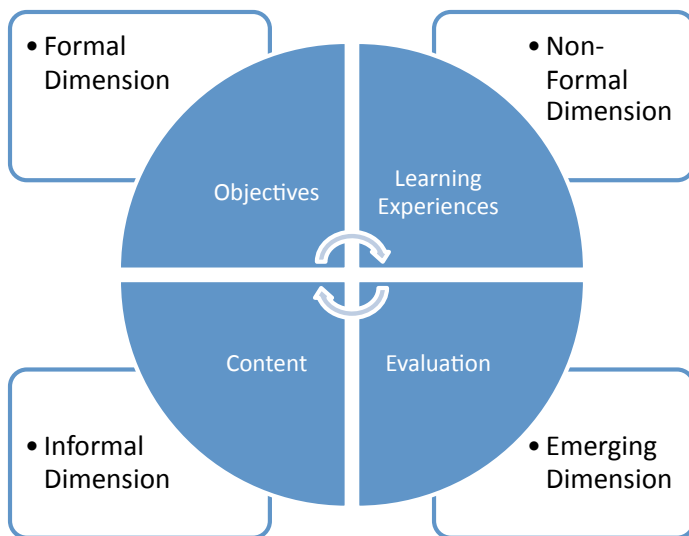


Figure 2: Relationship between Elements and Dimensions of Curriculum

Scope of Curriculum Studies

Curriculum studies occupies a focal place in education and it has a wide coverage. It incorporates a variety of issues and processes. The scope of curriculum studies includes the following:

- i. Curriculum Theory
- ii. Curriculum Planning
- iii. Curriculum Design
- iv. Curriculum Development
- v. Curriculum Implementation
- vi. Curriculum Evaluation.

Curriculum Theory

This refers to a set of related statements that give meaning to school curriculum. It points out the relationships among its ele-

ments and directs its development, use and evaluation. It gives justification for practices in curriculum (Nyagah, 2005).

Curriculum theory should provide a practical guidance to:

- i. What to teach
- ii. Who is taught
- iii. Who should control its selection and distribution
- iv. Who gets taught what?

Curriculum theory has the following functions:

- i. Description of a phenomenon
- ii. Explanation of a phenomenon
- iii. Prediction of a phenomenon
- iv. Controlling of a phenomenon.

Curriculum theory provides educators with a critical perspective about the society and its schools. Thus, they describe and explain the phenomena from a critical perspective. Curriculum theory is very important for planning curriculum. It helps in guiding the planning process and serves as bedrock in curriculum development.

Curriculum Planning

This is the process of gathering, selecting, balancing, and synthesising relevant information from many sources in order to design those experiences that will assist the learner attain the goals of education (Hass, 1981).

Curriculum planning is actually the thinking or conception stage of the curriculum development process. It deals with seeking key answers to the following questions:

- i. What should be taught?
- ii. How should it be taught?

- iii. To what segment of the population should it be taught?
- iv. What should be the relationship between the various components of the curriculum?

Curriculum Design

This refers to the structure or pattern of organisation of the curriculum. It is largely concerned with issues such as what to include in the curriculum and how to present it in such a way that the curriculum can be implemented with understanding and success. It is therefore the way in which the component parts or elements of the curriculum have been arranged in order to facilitate learning. The elements of curriculum in the core of curriculum design are:

- i. Aims, Goals and Objectives
- ii. Content
- iii. Learning Experiences
- iv. Evaluation.

Curriculum Implementation

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

Curriculum Evaluation

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

Relationship of Curriculum Studies with other Disciplines

The question that arises here is: *How is curriculum studies related to other Disciplines?*

The fact is that all other disciplines contribute immensely at different stages of curriculum process. They form an integral part of curriculum studies. These disciplines are as follows:

Educational Psychology

Educational psychology is very intricately interwoven with curriculum studies. The principles of educational psychology are extensively used in curriculum development or planning and in curriculum implementation. In the selection of objectives, content, learning experiences, organization of learning experiences and evaluation, the curriculum planners refer to psychological principles to ensure that the needs, interests, aspirations, abilities and capabilities of the learners, as well as their mental and chronological ages, are taken into consideration.

Philosophy of Education

Curriculum studies is guided by theories of educational philosophy in verifying and clarifying aims and objectives of education. It is the knowledge of philosophy that helps one understand the rationale for sending learners to school. It is through the knowledge of philosophy that curriculum worker determines:

- a) what to teach
- b) why he or she must teach
- c) where he or she teaches.

Sociology of Education

This contributes and helps the curriculum developer in the selection of learning experiences. It ensures that the learners' experiential background is considered in determining what is to be taught and what is to be used in teaching in order to make learning meaningful. Sociology of education exposes the needs of the society and what it expects the school to do for the society.

Educational Measurement and Evaluation

This helps the curriculum developer to determine the effectiveness, validity, and reliability of the methods. It also helps to determine the instructional procedure in relation to the content and learning experiences for a particular group of learners. Equally, whatever is taught has to be evaluated in order to determine if the objectives have been achieved.

Educational Technology

This helps the curriculum developer to provide the best instructional resources for the implementation of the curriculum. Without the use of instructional materials, the effective implementation of planned curriculum would not be possible.

CHAPTER TWO

FOUNDATIONS OF CURRICULUM

Concept of Foundations of Curriculum

A clear knowledge of the foundations of curriculum is a vital tool for all the stakeholders in the development and implementation of the school curriculum. Curriculum is dynamic and ever changing. The present day curriculum in Africa did not evolve from a vacuum. According to Obasi (2009), societal changes, aspirations and realisations, scientific and technological knowledge, increasing innovation in the processes, practices and procedures in teaching, bring about immense change in the curriculum.

When someone wants to build a house, for example, he or she starts with the foundation of the building. The foundation is what holds and makes the building to remain strong. Based on this statement therefore, there is also need for foundation in curriculum. According to Shiundu and Omulando (1992), foundations of curriculum is defined as the values, traditions, factors and forces which influence the kind, quantity and quality of the experience the school offers its learners. Simply put, *foundations of curriculum refers to the forces that influence the development and implementation of the curriculum in order to meet the needs of the learner and that of the society.*

There are four major foundations of curriculum namely:

- i. Historical Foundations
- ii. Sociological Foundations
- iii. Philosophical Foundations
- iv. Psychological Foundations.

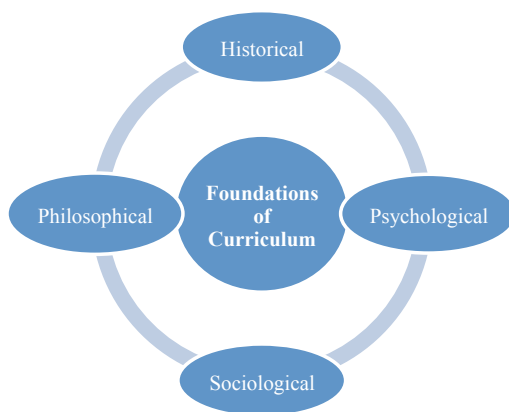


Figure 3: Foundations of Curriculum

Historical Foundations of Curriculum

Historical foundations of curriculum refers to those influences on the curriculum that are derived from developments in the past. They form the basis for decision making and systematic growth of the educational system. According to Obasi (2009), the following are the benchmarks for historical foundations of curriculum:

- i. African Indigenous Education (The Traditional Curriculum)
- ii. The Missionary Bodies Curriculum
- iii. The Renaissance
- iv. The Reformation
- v. The Scientific Movement in Education
- vi. The Progressive Movement in Education

African Indigenous Education

The goal of the traditional society was to induct the learners into the lifestyle of their traditional society as worthy members for effective living and for common good of all the members of the society. Before colonisation of Africa, Africans had no established

literacy and formal schooling as they are known today. That does not, however, mean that Africans had no organized educational systems of their own. They had systems of education which bore basic similarities. However, education as practiced by each of the many ethnic groups had its own distinctive features, reflecting the particular life and culture of its people.

The basic similarities in indigenous education in Africa are that it was strongly adapted to the environment, both physical and social. Indigenous education in Africa was essentially an education for living, and its main purpose was to train the youth for adulthood within the society. The traditional curriculum placed more emphasis on normative and expressive goals (Obasi, 2009). Normative goals were concerned with instilling the accepted standards and beliefs governing behaviour, and expressive goals aimed at creating unity and consensus.

The basic aims of the traditional curriculum were to conserve the cultural heritage of the family, clan and ethnic group, and to adapt children to their physical environment and to teach them how to utilize it sustainably. In broader terms, the traditional curriculum or African indigenous education emphasized social responsibility, job orientation, political participation, and spiritual and moral values.

According to Fafunwa (1974), the aims of African indigenous education are as follows:

- i. To develop the child's latent physical skills.
- ii. To develop character.
- iii. To inculcate respect for elders and those in position of authority.
- iv. To develop intellectual skills.
- v. To acquire specific vocational training and to develop a healthy attitude towards honesty and labour.
- vi. To develop a sense of belonging and to participate actively in family and community affairs.

vii. To understand, appreciate and promote the cultural heritage of the community at large.

The curricula of Indigenous Education in Africa consists:

Childhood Education

Proper formation of the child at the tender age had been vital in the traditional society. According to Sifuna, Chege and Oanda (2006), African traditional societies hold children to a greater esteem. When a baby is born, for example, there is always interest, joy, encouragement and well-wishing. The arrival of a new-born baby strengthens marriage and ensures the continuity of the family bond.

In childhood education, the parents are the first to inculcate virtues in their children and help them shun vices. Games occupy an important place in conformity with the awakening of intense mental and physical activities. Children are left to their own initiative to make toys from local materials of their choices and interests. They mould from mud and clay and make use of articles which are of little use to adults. They also cook using sand and some spoilt vegetables and other local ingredients; making their own pots using tins. As children grow, they engage in more productive education. They learn to take part in agriculture, hunting, herding, cooking, and collecting firewood due to the influence of their elders.

Adolescence Education

The adolescence stage is always an exploration stage by many young people. A child enters into adolescent stage through the rites of initiation (Sifuna, Chege & Oanda, 2006). In this stage, educational activities in the African societies centre on physical exercises, sex education, awareness of responsibility, and a harmonious acceptance of the initiate into the community. The main content of the adolescence education are respect for the elders,

self-reliance, hard work, generosity, discipline, war against incest, fornication, assault, and theft.

Missionary Bodies Curriculum

Colonial administration stimulated the activities of the Christian missionaries. Most missionary groups took advantage of colonial activities such as good transport systems, financial support, and law and order. By 1910 there were more than 400 Protestant and more than 500 Roman Catholic Missionaries in Africa (Sifuna & Otiende, 2006). Both Catholics and Protestants provided education that enabled learners to help in evangelization. This included singing, scriptures, prayers, reading, and religion. The missionaries placed much emphasis on basic education whose aims were to produce a good Christian. Secondary education was de-emphasized; a fact that impressed the colonial masters.

Christian missionary education emphasized the teaching of skills in manual labour. This was based on the beliefs that Africans were lazy and their laziness was rooted in their traditional practices (Sifuna & Otiende, 2006). Based on this misconception, the Church sought to overthrow all African practices such as:

- i. initiation ceremonies
- ii. clothing ceremony
- iii. recourse to the ancestors
- iv. drumming at traditional festivities
- v. new harvest festivities
- vi. masquerade dances, etc.

The condemnation of African practices was enforced by the belief in Europe that Africans were inferior to the Europeans; their skulls were said to be smaller than those of the Europeans. Vocational education was therefore considered as the answer to end

the perceived indolence and depravity in Africans. It thus became part of the curriculum to help Africans succeed economically.

The primary objective of the missionaries was to convert Africans to Christianity through education. In an attempt to achieve this objective, they established schools to ease the problems of reading and writing. Reading, writing and arithmetic constituted the core curriculum of the missionaries (Obasi, 2009). The emphasis on reading was necessary because the colonial masters wanted people who could interpret the Bible and also communicate with the 'white man.' Knowing how to write was not limited to clerical duties but was also used to document important events for individual purposes. Arithmetic was also taught in order to enable the workers give accurate account in their commercial houses.

According to Shiundu and Omulando (1992), the curriculum of the early Christian schools comprised the teaching of:

- i. Discipline
- ii. Church Doctrine
- iii. Moral standards
- iv. Christian theology
- v. Science
- vi. Mathematics
- vii. Astronomy

However, the colonial curriculum produced a colonial person who fell under the influence of commercial officers, the colonial government and Christianity.

Renaissance

The Renaissance has been referred to as a revival period while others see it as a re-birth of knowledge. This is the period in Europe during 14th, 15th and 16th centuries when people became

interested in their ideas and cultures of ancient Greece and Rome and used their influence in their own art and literature. The increased quest for knowledge, and the thirst for adventure, led to an increased desire to open up education to the masses. A direct outcome was the establishment of ‘Humanistic Schools.’ The curriculum of the ‘Humanistic Schools’ emphasized the study of man as a prerequisite to understanding man’s role and contribution to society.

Renaissance is a situation when there is a new interest in a particular subject or form of art after a period, which was not very popular. Renaissance is a form of reawakening from some of the concepts. The Renaissance also marked a period where there was an increasing authority of science. Experimental science in proportion displaced the Christian notion of an unrealistic existence after death. It opened up the engaging prospect of indefinite improvement in life to be effected by the application of human reason to the mastery of the physical and social environment which determined human life (Sifuna & Otiende, 2006).

We see the revolts of the intellects of Europe against medievalism. The revolt was political, ecclesiastical, philosophical and also literary. The ability of men and women to think out of the box made them to question certain authorities. The quest for new knowledge helped them to question the knowledge established by the ecclesiastical authority. Based on this therefore, they aspired for freedom from authority slavery and were able to express themselves freely.

Renaissance therefore represents a gradual break with the medieval times. It was characterized by great interests in learning and an emphasis on the scholarly exactness: Faculty of Arts, Medicine, Theology, and Law. During this period, education was more secular than religious. Here, reasoning became more important than faith. The emphasis on reason led to classical learning and modern

liberalism. It was to a great extent an age of optimism and the feeling was that no discovery and no scientific advance could be beyond human achievement.

The Renaissance had the following achievements:

- i. It promoted architecture, painting and poetry.
- ii. It produced great men such as **Niccolò Machiavelli** (1469 – 1527; an Italian statesman and writer, whose work *The Prince* advises that acquiring and exercising power may require unethical methods), **Michelangelo** (1475 – 1564; an Italian renaissance sculptor, painter, architect, poet, and engineer who exerted an unparalleled influence on the development of Western art), and **Leonardo di ser Piero da Vinci** (1452 – 1519; an Italian renaissance polymath: painter, sculptor, architect, musician, mathematician, engineer, inventor, anatomist, geologist, cartographer, botanist, and writer. His genius, perhaps more than that of any other figure, epitomized the Renaissance humanist ideal).
- iii. It liberated men and women from the narrowness of medieval culture.
- iv. It created an atmosphere where individual genius could flourish by reviving the knowledge of the Greek world.

Reformation

The Reformation, traditionally described as having been begun by Martin Luther in 1517, was the movement which gave rise to Protestant Churches and the decline of the power of Roman Catholicism. The Reformation sought to restructure Christianity by returning it to original beliefs based solely on reference to the Bible, eliminating later additions which accumulated in tradition.

The causes of the Reformation cannot be located in any one event or in any one aspect of medieval society. It was not just a matter of religion or politics or social discontent. It was, rather,

a combination of all of these things; it was a problem which extended through all aspects of society and how people lived. There was dissatisfaction, discontent and malaise everywhere.

Bible-based, covenantal, Christian day-school education, then, is in every respect one of the fruits of the Reformation. It was the Reformation that promoted compulsory education for all children.

The Reformation doctrine of Scripture led to the need for an educated membership able to read and understand the scriptures for themselves. The Reformation doctrine of the priesthood of all believers put even more stress on the necessity of an educated laity by its insistence that it was not only the right, but the obligation of every Christian to read, know, memorise, learn, understand, and apply the Word of God in all areas of life. The Reformation doctrine of faith, with its denial of implicit faith as taught by Rome and its emphasis on faith as knowledge, also demanded education for every believer.

Furthermore, the Reformation's recovery of education was not incidental, but belonged to the very heart and soul of the Reformation. Humanly speaking, there could have been no Reformation, nor would the Reformation once begun have survived without the Reformation's own emphasis on reformed education. To lose Christian Education is to lose the Reformation, and to lose the Reformation is to lose the very principles on which Christian Education is based.

In an attempt to win back followers, the Catholic Church launched a counter-reformation. These were, simply, efforts to hold lands which were still loyal and to win back lands that had been lost (Sifuna, Chege & Oanda, 2006). Education was foremost in the minds of the leaders of the counter-reformation; the faithful were to be educated. For this, capable priests were needed, and, thus, seminaries multiplied to prepare the clergy for a more austere life in the service of the Church. There was a flowering of visionary

ideas, which should be remembered when trying to understand unofficial Catholic thought of the period.

The counter-reformation gave rise to the Society of Jesus (Jesuits). The Society of Jesus was founded in 1534 by Ignatius of Loyola. Despite not specifically a Teaching Order, it was nevertheless very important in this field. Sifuna and Otiende (2006) brought out the curriculum of *ratio studiorum*; an elaborate plan of studies issued by the Jesuits in 1599 as follows:

- i. Human letters consisting of language and literature with emphasis on Latin and Greek classics, some vernacular studies and work in grammar, poetry, rhetoric and history.
- ii. The arts or natural sciences; consisting of logic, physics, metaphysics and mathematics.
- iii. Theology, scholastic and positive theology, and Biblical studies.

According to Cubberley (as cited in Shiundu & Omulando, 1992), the Reformation contributed further to educational growth by inciting the Church into greater activity in elementary, secondary and higher education.

Scientific Movement in Education

The scientific realists are modern philosophers and educators who believe in extra-mental reality of things of nature. At the forefront of these philosophers and educators were Francis Bacon, Amos Comenius, John Locke, Jean Jacques Rousseau and Johannes Friedrich Herbart. The emphasis of these realists is on the simulation of the environment of learning to be as natural as possible. They also favour the empirical approach to knowledge acquisition as well as child-centred education.

The stance adopted by realism was that objects as we see them exist in the real world, divorced from the human mind and perception. Realism has three distinct phases to it with various implications for curriculum development. These are:

- i. Humanistic realism which advocated learner mastery of form and content of the old literature (Roman literary works) as a basis for improving the present world.
- ii. Social realism which aimed at meeting the purposes of the contemporary world by producing a polished gentleman of high society. It was class-conscious and emphasized private tuition in the home using paid tutors.
- iii. Sense realism which focused on the problems of the current world and emphasized on an instructional approach based on sense perception.

Progressive Movement in Education

John Dewey, Jean Heinrich Pestalozzi, Maria Montessori, John Amos Comenius, Jean Jacques Rousseau, and Johannes Friedrich Herbart were some of the advocates of the progressive movement in education. They were reacting against what they strongly believed to be the failures in the traditional school system. According to Shiundu and Omulando (1992) in their criticism of the traditional school system, they argued that:

- i. The curriculum content of the traditional system included a great deal of meaningless and needless content.
- ii. The traditional curriculum did not give a utility education, but rather emphasized mainly on academics.
- iii. The traditional methods of teaching introduced the child to subject matter of no practical value.
- iv. The traditional curriculum was rigid and did not cater for the individual needs of particular learners.

With regard to the above therefore, the progressive education curriculum intending to provide a learning atmosphere that allowed children maximum self-direction, and to reduce teacher domination

of the teaching and learning process, emphasized the following approaches to the teaching and learning process:

- i. Teacher-pupils planning of curricular activities.
- ii. Flexible curriculum and individualization instruction.
- iii. Non-formal curricular activities and physical training in areas such as games and related hobbies.
- iv. Learner-centred methodologies.
- v. Selection of study material in line with the expressed interests and concerns of the learner.

Sociological Foundations of Curriculum

Education is for the individual and the society. The needs of the society should play a vital role in the formulation of any school curriculum. In the sociological foundations, the curriculum developer focuses on cultural values, societal needs and the learners' backgrounds. The curriculum is designed in such a way that it gives the learner the ability to deal with problems in society by providing ample opportunity and situations that make it possible for the individual to confront these problems effectively.

According to Shiundu and Omulando (1992), the sociological foundations of curriculum deals with the systematic study of groups and institutions in the culture with reference to their contributions to the process and growth of the educational system as well as the established practices in the school system. The ideals of the education system of any country are determined by the culture of its society. The interplay between social foundations and the curriculum can best be established by considering it as three distinct levels:

Purpose of the Curriculum

Here we look at school as an agent of social growth, development and reform. Schools should perform the functions of:

- a) Preservation and transmission of cultural heritage.
- b) Transformation of culture.
- c) Development of the learners' potentials and helping them to determine and attain their goals.

Pressure Influencing the Curriculum

Formal and informal pressures from the society influence the school a lot. For example, formal complaints directed at school personnel will influence input in curriculum development at the school level. Informally, gossip and rumour regarding current practice in the educational system will also influence the teachers' approach to curriculum implementation.

Characteristics of the Learners Experiencing the Curriculum

In the design and development of the school curriculum, there is need to consider the learner as an individual because the curriculum is meant for him or her. Here, we need to bear in mind that:

- a) The social structure of which a learner is a part dictates the relevance of the curriculum (rural-urban areas, wealthy-poor families, and religious background).
- b) Aspirations of learners are pertinent in designing and developing the curriculum. There is need for the curriculum to help build positive attitudes in the learner and to raise the level and quality of his or her aspirations.
- c) The environment has effect on the mental development of the learner. Creation of a suitable learning environment helps the less able learners to improve on their academic performance.

Philosophical Foundations of Curriculum

Philosophy is the study of ideas about knowledge, truth, the nature and meaning of life. Like theology as opined by Iwuchukwu (2003), philosophy consists of speculations on matters as to which definite knowledge has, so far, been unascertained. Philosophy is an academic discipline concerned with making explicit the nature and significance of ordinary and scientific beliefs and investigating the intelligibility of concepts by means of rational argument concerning their presuppositions, implications, and interrelationships. In particular:

- i. The rational investigation of the nature and structure of reality (metaphysics).
- ii. The resources and limits of knowledge (epistemology).
- iii. The principles and import of moral judgement (ethics).
- iv. The relationships between language and reality (semantics).

Philosophy seeks to provide answers to basic problems of life. It also seeks to establish coherence in the whole domain of life experiences. In utilizing knowledge of philosophy in curriculum, the curriculum developer is seeking to establish ideas and notions that will indicate a priority of values in selecting experiences for the curriculum.

Philosophical foundations constitute the values and beliefs that make up the philosophies of life and of education, and have a permeating influence on the other foundations. Statements of educational philosophy point to the methodical efforts by philosophers to:

- i. Examine values in the society.
- ii. Derive meanings from facts.
- iii. Organise experiences in a manner useful to educational practitioners and the learners in the school system.

- iv. Justify one or some educational beliefs over others.
- v. Develop new proposals of educational practice for translation into action.

With regard to the theories of subject matter, the three main philosophical schools state the following:

- i. *Perennialism*: Subject matter should be taught for its sake.
- ii. *Essentialism*: Subject matter should be taught for use.
- iii. *Progressivism*: Subject matter is a medium for teaching life processes and skills.

Psychological Foundations of Curriculum

Psychological foundations of curriculum simply refers to those insights gained from psychology which have a bearing on the learning process. In the psychological foundation, the following are put into consideration when dealing with learning experiences in the curriculum:

- i. The capabilities of the learners.
- ii. The maturational level of the learners.
- iii. The learners' rate of learning as well as how they learn.

Psychologists are concerned with establishing patterns in human behaviour so as to be able to understand and predict behaviour. They also look for determinants of behaviour in hereditary characteristics, as well as in environmental influences. Psychology helps the curriculum developer, and the teacher, to reach decisions in relation to:

- i. Sequence – in the stages of development.
- ii. Organization – grouping of learning experiences for optimal effect.
- iii. Methodology – dealing with the question of what methods

and approaches are likely to promote and guide learning most effectively.

- iv. Formulation of appropriate educational goals.
- v. Decisions regarding the scope of the curriculum.

In planning curriculum experiences, the order of organization should be such that each preceding experience lays a foundation for or promotes the mastery of succeeding experiences. An understanding of certain basic psychological principles will enhance the effectiveness of planning, design and development of the curriculum in a number of ways. These principles are as follows:

- i. *The physical health and psychological status of the learner in the classroom.* This has a bearing on the rate at which he or she will learn.
- ii. *A learner's nervous condition.* This has an effect on his or her mental readiness.
- iii. *The learners' different age groups.* The curriculum needs to be planned in accordance to different age grade levels. Different age groups have unique problems which require that curriculum is planned to account for both the common problems of all youth and the specific problems occurring in the lives of individual learners.
- iv. *Learners' interest and aspirations.* Learners' interests and aspirations are important determinants of the curriculum structure and content, and hence influence learning effectiveness.
- v. *Rewards.* It is necessary for the teacher to plan in-built rewards when organising learning experiences to facilitate positive responses from learners to the teaching and learning environment.

CHAPTER THREE

CURRICULUM THEORY

Nature of Curriculum Theory

Some people relegate curriculum theory to the background despite its usefulness. This is because they feel it does not relate to their daily activities. However, sound theory is vital to every organization and curriculum theory provides a clear vision for educational principles, practice, and reforms. A theory deals with principles that apply across many different contexts. It is tested from different angles under varying circumstances. A theory protects an institution from making untested assumptions and generalizations. Theories provide tested valid ways of describing and solving a particular problem. This is because theories are predictions of relationships between variables that over time have come to be seen as reliable.

The word theory comes from the Greek word '*theoria*', which means 'to wake up the mind'. Theory explains reality. It draws people closer to their situation. A theory is a set of related statements that explains a phenomenon. These related statements are arranged so as to give functional meaning to a series of events. In curriculum, Nyagah (2005) defines theory as a set of related statements that give meaning to school curriculum. According to Glatthorn (2005), a curriculum theory is a set of related educational concepts that affords a systematic and illuminating perspective of curricular phenomenon. Curriculum theory points out the relationships among its elements and directs its development,

use and evaluation. It therefore gives justification for practices in curriculum.

With regard to the nature of curriculum theory, some philosophers of science see a theory from the point of view of “Received View” of scientific theory. Following this view, it depicts that science consists of bold theories that out space the facts. This Received View believes that a theory is a formalized, deductively connected bundle of laws that are applicable in specifiable ways to their observable manifestations. The realists or instrumentalists did not agree with the positivists’ assumptions of the Received View due to the fact that they could not see why a small number of concepts are selected as bases for the theory and axioms introduced to specify the fundamental relationships among those concepts. Furthermore, that every aspect of theory development is value laden and not value-neutrality as the Received View posited. More so, that theory is a description of those structures that generate observable phenomena; therefore, that the primary feature of scientific theory is the explanation of how underlying structures and mechanisms work to generate the phenomena being studie

Classifications of Curriculum Theory

Many scholars have worked very hard and tried to classify curriculum theory. In their efforts, there seems to be some pitfalls with regard to classifying curriculum theory. McNeil (as cited in Glatthorn, 2005) developed two classifications; soft curricularists and hard curricularists. The soft curricularists like William Pinar make use of religion, philosophy and literary criticism termed as soft fields in their approach, while the hard curricularists such as Decker Walker and Mauritz Johnson use a rational approach and rely on empirical data. This has been criticized in the sense that scholars say that these theories draw from the same research perspective.

There comes another classification by Pinar (as cited in Glatthorn, 2005). He classified curriculum theory as:

- i. *Traditionalists*: Such as Ralph Tyler who maintains the status quo, i.e. class, teacher, course, lessons, etc. in imparting the cultural heritage in the transmission of knowledge.
- ii. *Conceptual Empiricists*: Such as Robert Gagné who derive their research methodologies from the physical sciences in attempting to produce generalizations that will enable educators to control and predict what happens in school.
- iii. *Reconceptualists*: They emphasise subjectivity existential experience and the art of interpretation in order to reveal the class conflict and the unequal power relationships existing in the larger society.

The flaw of this classification according to scholars is that it mixes, in a confusing fashion, the theorists' research methodologies and their political stances. There are other classifications; however, there are four major classifications of curriculum theory that are more useful and productive. They are as follows:

- i. *Structure-oriented theories*: These tend to be descriptive and explanatory in intent and they are concerned primarily with analysing the components of the curriculum and their interrelationships.
- ii. *Value-oriented theories*: These tend to be critical in nature and they are solely concerned with analysing the values and assumptions of curriculum makers and their products.
- iii. *Content-oriented theories*: They tend to be prescriptive in nature and they are primarily concerned with determining the content of the curriculum.
- iv. *Process-oriented theories*: Some of these are descriptive in nature and others are prescriptive. They are mainly concerned in describing how curricula are developed, or recommending how they should be developed.

Functions of Curriculum Theory

Curriculum theory has four main functions: to describe, to explain, to predict, and to control or guide curricular phenomena and help educators make more reasoned choices with regard to the attainment of educational goals. Attainment of educational goals is the sole purpose of the selection and logical organization of educational and learning experiences. Therefore, the quality and impact of curricula functions are to be monitored by carefully observing the outcomes and data from these observations which are to be used to fine-tune the curricula. Hence, the need for a theory which illuminates, describes, explains, predicts and controls curricular phenomena.

Curriculum theory provides educators with a critical perspective about the society and its schools. Curriculum theory is therefore important for planning curriculum. It helps in guiding the planning process by looking at what should be taught, how it should be taught, to what segment of the population, and what should be the relationship between the various components of the curriculum. Curriculum theory builds curriculum development because the theory used is reflected in the produce, that is, the final curriculum.

In the function of description, curriculum theory provides a classification of knowledge in a particular theoretical field. It furnishes a structure through which a person's interpretations of complex activities can be verified. It also organises and summarises knowledge. In the function of prediction, a theory can predict the occurrence of as yet unobserved events on the basis of explanatory principles embedded in it. In the function of explanation, curriculum theory points out explicitly the reasons for the relationships between the curriculum elements. Lastly, in the guidance or control function, curriculum theory helps curriculum developers and implementers choose data for analysis and economic summary.

CHAPTER FOUR

CURRICULUM PLANNING

Meaning of Curriculum Planning

Planning is one of the most important elements in our daily activities. From the time we wake from sleep in the morning, we already planned what to do next. Further, there is virtually no achievement in human endeavour that does not require planning. For a learner to have good character and perform excellently academically, he or she requires efficient planning. Therefore, planning is a vehicle to success in everything we do as human beings.

Curriculum Planning is the decision making process in which the focus is on the determination of the nature, organisation and orientation of the curriculum design. Hass (1983) defines it as the process of gathering, sorting, selecting, balancing and synthesizing relevant information from many sources in order to design those experiences that will assist the learners in attaining the goals of the curriculum. Similarly, curriculum planning is defined as the thorough, systematic process of collating, sorting and synthesising information to ensure its relevance to the target population and in relation to the objectives that guide the whole process.

Curriculum planning is choice-oriented, task-oriented and goal-oriented. It is choice-oriented because the curriculum worker chooses relevant information from all the data collated. It is task-oriented because the process requires designing and redesigning of the programme. It is also goal-oriented because the programme aims at achieving a pre-determined set of goals.

Reasons for Curriculum Planning

The following are some of the reasons for planning a curriculum.

1. Curriculum planning helps to guide the activity of teaching.
2. It helps in the selection from the vast amount of knowledge stored.
3. It helps the teacher justify his position in the classroom and to explain the rationale of the curriculum.
4. It helps the teacher to defend his or her methods when there is any anomaly.
5. It helps the teacher to be accountable for the knowledge he or she shares with the learner in school.
6. It helps the teacher to state how the learning experiences will be imparted and the extent of their successes in the objectives.
7. It helps the teacher to know what rules to apply in teaching.

Factors Influencing Curriculum Planning

The following factors influence curriculum planning.

1. *Learner*: In curriculum planning, the learner is the central focus and the most important factor to be considered because it is for him or her that the curriculum is planned. There is need to consider his or her age, physical and intellectual development, level of education, experiences, motivation, needs and interests in the planning.
2. *Teacher*: The teacher is not only part of the whole situation, but to some extent, he or she is the controller of it. Every teacher has something to offer in curriculum planning, development and implementation.
3. *Society*: The society consumes the curriculum. The curriculum planners therefore need to have a general knowledge of the

society in planning the curriculum. A society can be defined as a group of individuals living in a particular geographical area and are regarded as members of a social unit. The curriculum should reflect the needs, goals, culture, aspirations, values, social, spiritual, political and economic life, and the problems of the society.

4. *Philosophy of the nation:* There is a great need for the curriculum to reflect the guiding principles or philosophy of education of the nation. This is because education is an instrument for effecting the overall development of the nation. The Nigeria Philosophy of Education, for example, is based on the integration of the individual into a sound and effective citizen. More so, access to equal educational opportunities for all citizens of the nation at primary, secondary and tertiary levels, both inside and outside the formal education system. The curriculum therefore needs to reflect the aims, goals, objectives and philosophy of the society it is being planned.
5. *Psychology of learning:* To embark upon an effective curriculum planning, the curriculum planner must be knowledgeable of certain psychological factors in learners, such as differences in their:
 - physical development and rate of growth
 - intellectual development
 - language development
 - personal and social adjustments
 - creative activities
 - home backgrounds
 - attitudes and beliefs.
6. *Subject matter specialists and textbook authors:* Subject specialists generate new ideas, new information, new findings from re-

search and offer professional opinions and suggestions on every aspect of the curriculum in their various disciplines. Moreover, the authors of textbooks used in schools usually determine the scope of content and the logic of organization of the subject matter. However, they do this in cognisance of the curriculum.

7. *Institutions of higher learning:* These are made up of universities, university colleges, colleges of education, colleges of technology, colleges of agriculture and polytechnics among others. They are the most significant factors that should be expected to give direction to the nation's school curriculum. This is because they make significant inputs in the school curriculum.
8. *Special government agencies, professional bodies and subject associations:* There are certain professional bodies that influence curriculum planning. These bodies include Nigerian Educational Research and Development Council (NERDC), National Universities Commission (NUC), Commission for University Education Kenya (CUE), Nigeria Union of Teachers (NUT), Kenya National Union of Teachers (KNUT), Curriculum Organization of Nigeria (CON), just to mention a few. These professional bodies organize conferences, seminars and workshops, and their inputs are vital to curriculum development. Through research, they generate new knowledge which is beneficial at every stage of curriculum.
9. *Finance or economy:* The design of the curriculum should be informed by the availability and size of the budget allocated to the education sector. This actually dictates the types of skilled manpower, infrastructural facilities and instructional materials that can be made available to facilitate the effective implementation of the curriculum programme.
10. *Labour market:* The curriculum planners need to have a good knowledge of the dynamic nature of the labour market. They

also need to equip themselves to adequately and correctly forecast the trend in the labour market. This will help them to formulate a curriculum that will accommodate possible incidental changes and discoveries such as the upsurge in the use of computers, which calls for the inclusion of skills in ‘computer technology’ in the curriculum.

CHAPTER FIVE

CURRICULUM DEVELOPMENT

Concept of Curriculum Development

After the planning of the curriculum, there is need for it to be developed. Curriculum development involves the whole process of designing and re-designing curriculum materials, trying them out, collating and synthesising data emanating from trial tests, and utilizing human and material resources to ensure that the objectives of the planned curriculum are achieved. In the view of Onwuka (1981), curriculum development is the evolution of new materials and methods of presentation to ensure effective learning as well as ways of evaluating the process to ensure that the specific learning has taken place.

In the same vein, curriculum development involves the creation of appropriate curriculum materials such as text and non-text materials, teachers' guides and instructional materials that are to be used in the implementation of the curriculum that has been planned. Curriculum development as stated by Yunus (2015) is the systematic planning of what is taught and learned in schools as reflected in courses of study and school programmes. He also reiterates that it is the process of setting up and establishing specific guidelines of instruction for the curriculum.

In trying to develop a curriculum, it requires that a certain process needs to be followed. According to Obasi (2009), curriculum development process means the stages undergone in the production of a structured set of learning experiences. It is worth

to mention that a relationship always exists between the elements of curriculum, i.e. the objectives, content, learning experiences and the evaluation. Hence, in order to fully and conveniently understand the relationship amongst these curriculum elements in the curriculum development process, there is need for a curriculum development model.

Models of Curriculum Development

A model provides a framework for helping us to understand a process. Models give us an organising function, which indeed provide a better way to explain the interaction between the elements of curriculum. A model is seen as a consciously planned simplified description of a phenomenon using a diagram. A curriculum development model may therefore be seen as a framework or plan of action for designing the structured set of learning experiences (Ivowi, 1994).

According to O'Neill (2010), curriculum models help designers to systematically and transparently map out the rationale for the use of a particular teaching, learning and assessment approaches. In trying also to define a model, Yunus (2015) looks at it as a simplified representation of reality which is often depicted in diagrammatic form. For him, models are used to explain levels of curriculum, aspects of organization practice, aspects of classroom instruction and types of decision making.

Ughamadu (1992) identified four stages that form the basis of various models of curriculum development. For him, these four stages are essential and they are interrelated. These stages are as follows:

- a) Selection of aims, goals and objectives.
- b) Selection of content and learning experiences.
- c) Organisation of content and learning experiences.
- d) Evaluation.

Scholars, according to Neary (as cited in O'Neill, 2010), outlined two polarised curriculum models:

- *The Product Model*: This emphasizes plans and intentions.
- *The Process Model*: This emphasizes activities and effect.

Hence, Ornstein and Hunkins (as cited in O'Neill, 2010) express that despite the technical usefulness of curriculum development models, they often overlook the human aspect such as the personal attitudes, feelings and values involved in curriculum making. These authors therefore advised us not to substitute these models with the usage of our professional and personal judgement on what is a good approach to enhancing student learning. Yunus (2015) classified these models into three as follows:

1. Rational/Objectives Models
2. Cyclical Models
3. Dynamic/Interaction Models

It is worth to mention that all the three models have their merits and demerits. More importantly, no particular model is preferred for it all depends on the preference of the developers. In terms of effectiveness, what matters is the consistency between the curriculum elements and not necessarily the ways that these are achieved.

Rational/Objectives Models

Typical examples of the rational/objective models are that of Ralph Tyler and Hilda Taba. In objectives models, the process of curriculum development seeks to provide answers to some basic questions about developing some programmes of instructions. These questions relate to WHY, WHAT, and HOW of education.

The WHY question seeks to provide a precise statement of objectives which will serve as a guide in any further action of curriculum development, while the WHAT question tackles the

problem of selecting and organising learning experiences as well as the planning and development of teaching or learning units. The HOW question considers teaching methods, techniques and approaches suitable for the programmes while considering the expectations of the society and the level of the learners.

The features of the rational or objectives models are as follows:

- i. They begin with the statement of objectives.
- ii. These objectives are taken as the basis for selecting content and method.
- iii. There is a fixed sequence amongst the curriculum elements in the order of objectives, method and evaluation.

Tyler Model

Ralph Tyler is the pioneer of the objectives model. His model is also referred to as the linear model (Tyler, 1949). He asserts that there are four fundamental questions that must be answered in the process of curriculum development. These fundamental questions and their curriculum planning framework are:

- a) What educational purposes should the school seek to attain?
– Objectives.
- b) What educational experiences can be provided that are likely to attain these purposes? – Learning experiences.
- c) How can these educational experiences be effectively organised? – Organisation.
- d) How can we determine whether the purposes have been achieved? – Evaluation.

Figure 4 depicts Ralf Tyler's model of curriculum development. They are in steps. They are also linear in nature.

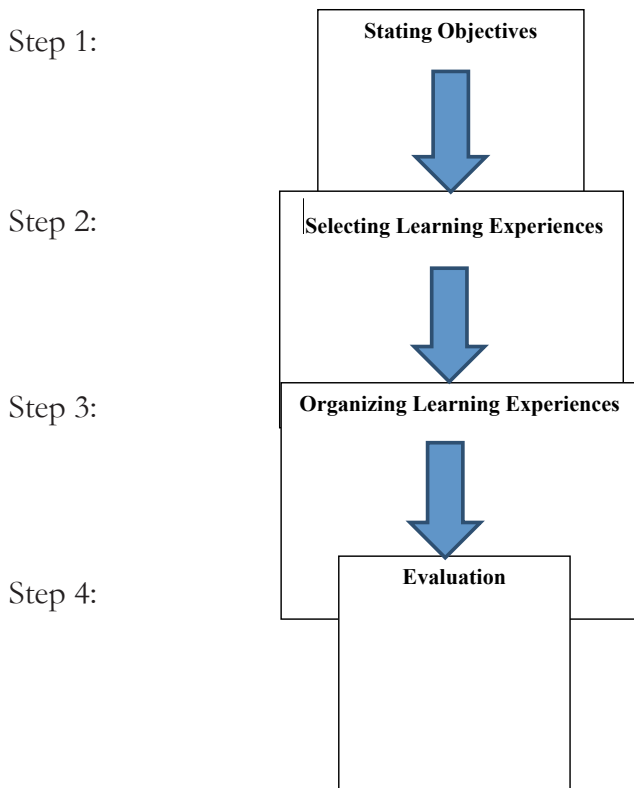


Figure 4: Ralf Tyler's Linear Model of Curriculum Development

Drawing from Figure 4, Tyler argues that there is a linear relationship among the four steps. This is due to the fact that the most crucial step is the first step as it determines what happens in the other steps. He lays much emphasis on the objectives. His argument is that if we are to study an educational programme systematically and intelligently, we must first be sure of what the

educational objectives aim at. Tyler's model is too simple a model and assumes that evaluation needs to be a terminal process only.

Taba Model

Taba (1962) believes that teachers who teach or implement the curriculum should participate in developing it. She advocated for grassroots approach where teachers could have major input in the development of the curriculum. Her model is linear as that of Ralph Tyler and she designed seven major steps of curriculum development process as follows:

- i. Diagnosis of learners' needs and expectations of the larger society.
- ii. Formulation of learning objectives.
- iii. Selection of the learning content.
- iv. Organisation of learning content.
- v. Selection of the learning experiences.
- vi. Organisation of learning activities or experiences.
- vii. Determination of what to evaluate and the means of doing it.

Taba's model is inductive in approach where curriculum developers start with the specifics and build up to a general design. It is also teacher approach because she believes that teachers are aware of the learners' needs, hence they should be the ones to develop the curriculum.

Taba holds that the curriculum development planning process should start with diagnosis of the needs of the learners and society; that the data from this process enable the curriculum developer to identify problems that confound the learners. Diagnosis of needs enables the curriculum experts to identify the discrepancy gaps which the new curriculum hopes to resolve in order to equip the learner with appropriate skills and abilities so as to function effectively in the society.

Taba argues that the first step in the process of curriculum development is important because without an adequate systematic need analysis, appropriate objectives will not be formulated (Obasi, 2009). Furthermore, she states that needs analysis lead to the selection of worthwhile content and learning experiences. This accounts for differences in curriculum design in the world today due to the fact that each country has its peculiar problems and needs. Learning experiences are then organized to suit learners' needs and interests. Finally, there is evaluation to determine if learning experiences, content and the organization pattern are suitable and appropriate in attaining the stipulated objectives.

Merits of Rational/Objectives Models

- There is apparent logic in the sequence of the stages of curriculum development in the model.
- With the objectives as the first stage, the developer is provided with a clear direction and a guide for the entire process.
- It provides a blueprint and a fixed guide for the curriculum development process.

Demerits of the Rational/Objectives Models

- It provides a dichotomy between the ends: objectives and the means, content and method, which should not.
- It wrongly assumes that all subjects are suited to the specification of objectives; whereas this is not true. The arts subjects are good examples.

Cyclical Models

A typical example of the cyclical models is that of Wheeler (1967). Wheeler's model for curriculum development was con-

ceived to take care of the criticism of the Tyler's model. In this model, Tyler's linear model was converted into a cyclic and continuous process. Essentially, both models involve selection of objectives, selection of means for attainment of these objectives, organising the means, and evaluation. With this, we realise that the cyclic and continuous nature of Wheeler's model makes it clear that curriculum development process should be dynamic. It is expected to go on and on, as the needs and interest of society, and the objectives, also change.

Phases of Wheeler's Model

Wheeler's model consists of five phases as follows:

1. The selection of aims, goals and objectives.
2. The selection of learning experiences calculated to help in attainment of these aims, goals and objectives.
3. The selection of content through which certain types of experience may be offered.
4. The organization and integration of learning experiences and content with respect to the teaching/learning process within school and classroom.
5. Evaluation of the effectiveness of all aspects of phases 2, 3, and 4 in attaining the goals detailed in phase 1.

Figure 5 shows the cyclical model of Wheeler.

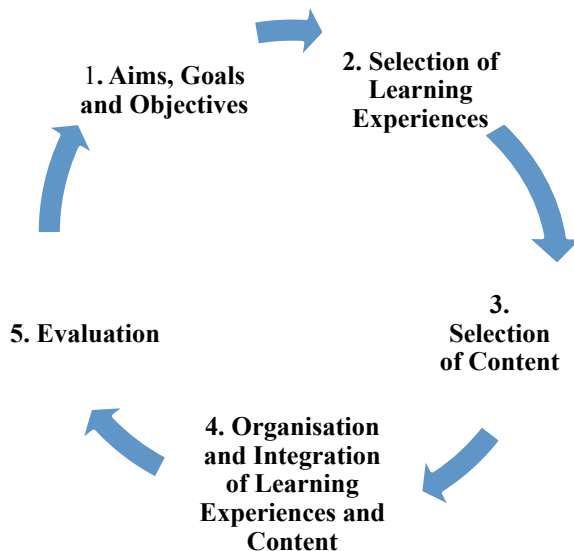


Figure 5: Wheeler's Cyclical Model

Wheeler's cyclical model shows that curriculum development process is a continuous activity. It starts with determination of aims, goals and objectives and sequentially goes through the other three phases to evaluation. Further, the feedback from evaluation is used to determine new aims, goals and objectives. This leads again to the selection of new content, new learning experiences and back to evaluation. Wheeler also strongly believes that curriculum decision making can start from any point and come back to any of the points, i.e. like a cycle (Yunus, 2015).

Dynamic/Interaction Model

Interaction models refer to those models that show different relationships among curriculum elements than the objectives models (Obasi, 2009). They respond to the dynamic nature of curriculum

development. More so, they provide for any curriculum elements to be a starting point and for the elements to be followed in any sequence.

Features of the Dynamic/Interaction Model

The main features of the interaction models are:

- a) They begin with curriculum elements.
- b) Any sequence amongst the curriculum elements may be followed.
- c) The curriculum elements are interpreted as interactive and progressively modifiable.
- d) The order of curriculum planning may be changed to suit a given intention.
- e) Reaction to the learning situation determines the sequence to be followed.

Figure 6 represents an interaction model. In this interaction model, there is interrelationship between all the elements of curriculum. Any element can also be the starting point in the curriculum development.

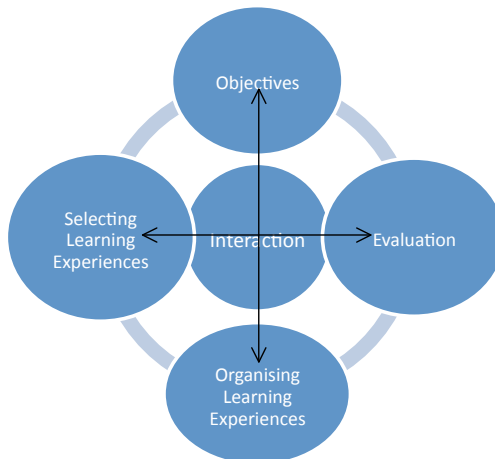


Figure 6: Interaction Model

Merits of Interaction Model

- It promotes creativity since it allows any order of procedure amongst the curriculum elements.
- It is flexible due to the fact that it allows a reaction to the learning situation.
- It reflects a reality of curriculum development since it permits any of the elements to form the starting point.

Demerits of Interaction Model

- It is not systematic since it has no fixed direction or sequence of action.
- It does not necessarily specify objectives as the starting point in curriculum. This is dangerous because the objectives may be lost completely or irrelevantly attached to the content specification.

Conclusion

A curriculum development model is a convenient method of showing the relationship amongst the curriculum elements in the curriculum development process. It is of vital importance. This is because it helps curriculum developers to systematically and transparently map out the rationale for the use of particular teaching, learning and assessment approaches (O'Neill, 2010).

CHAPTER SIX

CURRICULUM DESIGN

Meaning of Curriculum Design

Curriculum design is influenced by the philosophical, psychological, sociological, and historical orientation of the curriculum developer, and ideally, by the characteristics of a sound curriculum (Hasegawa, 2014). Curriculum design is simply the way of presenting learning opportunities in order to emphasise a chosen set of educational goals. It can also be referred to as an author's or writer's document or master plan for curriculum implementation.

Curriculum design can also be seen as the way in which the components or elements of the curriculum – objectives, content, learning experiences and evaluation are arranged in order to facilitate teaching and learning. This helps schools to formulate feasible daily and weekly plans of work. The organisation of these components of the curriculum into a coherent and meaningful curriculum plan is termed curriculum design.

Patterns of Curriculum Design

There are several patterns of curriculum design. They are as follows:

- a) Subject or Discipline-Centred Design (Traditional Design)
- b) Activity or Experience Curriculum Design (Learner-Centred Design)
- c) Core Curriculum Design (General Curriculum)
- d) Broad-Fields Curriculum Design (Integrated Curriculum)

Subject/Discipline-Centred Curriculum Design

This is also regarded as the traditional design. This is the pattern of curriculum design which structures the curriculum into compartmentalised bodies of organized knowledge. The emphasis is on making the learners absorb as much knowledge as possible concerning a particular course. In its perfect form, the subject curriculum design organises the curriculum into a number of subjects, each of which purportedly represents a specialized and homogeneous body of content. The outcome of this pattern is the different school subjects as they exist today.

In this approach, the content of education is organised into discrete subjects of instruction. Each subject of instruction is taught in isolation, divorced from other subjects, e.g. biology, religious education, agriculture, geography, etc. The subject-centred approach emphasises expository discourse and techniques of explanation. Teaching procedures and techniques are largely based upon language activities, e.g. lectures, discussions, oral reports, term papers, questions and answers exercises, etc.

Strengths of the Subject/Discipline-Centred Curriculum Design

- It constitutes a logical method for organising and interpreting learning.
- Planning is easier and simpler.
- It is appropriate for developing the intellectual powers of learners.
- It is more readily used for modern teachers.
- Evaluation of the educational programme is readily carried on since it involves primarily testing for the acquisition of subject matter and the development of skills and abilities.
- Textbooks and other teaching materials that are used in the school system are usually organized along subject lines. With

this, the subject matter to be learned is clearly, precisely and properly laid out.

- Class timetabling can be conveniently compartmentalised to correspond to subject requirements.

Weaknesses of the Subject/Discipline-Centred Curriculum Design

- It is too compartmentalised and fragmented in nature. This makes it unlikely for learners to attain the fullest development of the cognitive domain of learning.
- It limits the schools in the attainment of its desired outcomes. It neglects many desirable aspects of learner's growth and development.
- It is too examinations oriented.
- It fails to develop habits of effective thinking by presenting content of a subject using expository techniques, thereby encouraging learning by repetition and memorization. Life experiences here are also de-emphasised.

Activity/Experience Curriculum Design

This pattern of curriculum design is also known as learner-centred design. This is a way of organising curriculum which centres on the particular activities or active interests of the learners. It is a child-centred approach. It is based on the argument that although it is the job of the school to train the child in socially useful knowledge and to help him or her develop satisfactory activities or interests, the school needs to focus on the interest of the learners.

Some of the characteristics of this type of design are:

- a) The learners' felt needs, interest, problems and purposes determine the curriculum.

- b) It provides for common learning and these common learning results from the pursuance of common interests.
- c) The activity curriculum is not planned in advance; rather, it is developed by the teacher and learners as they work together in the school.
- d) The activity curriculum focuses on problem solving procedures for learning.

Strengths of the Activity/Experience Curriculum Design

1. It makes learning more meaningful and purposeful for the learners since it focuses on the felt needs, interests and purposes of the learners.
2. It provides for individual differences of learners since it places emphasis primarily on the growth and development of learners.
3. Its problem-solving approach provides the learners with the process skills that they very much need in order to cope effectively with life outside the school.
4. It allows a large measure of flexibility and makes the learner an active participant in the structuring and planning of a programme that concerns him or her through teacher-learner planning.
5. It provides functional learning that is directly related to life experiences of the learners.

Weaknesses of the Activity/Experience Curriculum Design

1. It may be difficult to determine genuine needs, interest and purposes of the learner.
2. It may not be very easy to provide all the resources to meet the daily requirements of the learners, more so, since the activities cannot be predetermined.

3. It minimizes the schools' social responsibility by allowing only the learners to determine what is to be included in the curriculum based on their needs, interests and purposes.
4. Textbooks and other teaching materials that are generally organised by separate subject areas are most unsuitable for this curriculum.
5. Learners' interests and needs are emphasized and this may lead to the neglect of social values, norms and ideas.

Core Curriculum Design

The core curriculum represents the group of subjects which every learner must take in addition to his or her specialities. The core curriculum is intended to provide common learning or general education for all the learners in the school. In effect, it constitutes the segment of the curriculum that teaches the common concepts, attitudes and skills needed by all the learners so as to function effectively in the society. The core curriculum is aimed at developing integration in order to serve the needs of learners, to promote active finding, and to highlight the interrelationship between content and the real-life experiences of learners.

Characteristically, in the core curriculum:

- Social values are emphasized.
- Its structure is fixed by broad social problems or by themes of social living.
- Activities are cooperatively planned by the teacher and the learners.
- Special needs and interests of the learners are catered for.
- Skills are taught as at when due.

Strengths of the Core Curriculum Design

1. It promotes transfer of learning by exposing learners to real-life problems.
2. It gives teachers the opportunity to render proper guidance and counselling to learners.
3. It tends to humanize education as it utilizes the problem solving, inductive and other methods.
4. It helps to develop many skills and abilities in meaningful situations and it is used to further ongoing activities.
5. It makes it easier for all learners to be exposed to the same minimum standard of knowledge at a particular level of education.
6. It makes it possible for all schools to operate a curriculum that is broadly similar within a country or locality.
7. It encourages the use of learning experiences that are significant and meaningful to learners.

Weaknesses of the Core Curriculum Design

1. It does not encourage specialisation.
2. The attempt to combine subjects usually results in one subject dominating the others.
3. Since it is society-oriented, and since needs and problems of different societies differ, this pattern of curriculum design has no uniform programme for learners in different geographical areas.
4. It fails to offer significant and systematic knowledge.

Broad-Fields Curriculum Design

The broad-fields curriculum design is conceived to overcome the criticisms of fragmentation or compartmentalization of knowl-

edge and the lack of links between subject matters of the subject/discipline-centred curriculum. One of the aims of this approach is to achieve knowledge integration through subject integration. In other words, the focus of broad-fields curriculum is that of synthesizing logically related content areas into an integrated whole so that the compartmentalization will be overcome.

In broad-fields approach, several subjects are fused into large fields of study. Examples are, social studies incorporating history, geography, civics, economics, government, etc. Physics, chemistry and biology are fused to form integrated science. The main characteristic of broad-fields curriculum is its synthesis of different subjects into an integrated whole, e.g. social studies and integrated science.

Strengths of the Broad-Fields Curriculum Design

1. It facilitates transfer of learning.
2. It permits greater integration of subjects.
3. It represents a more functional organization of knowledge.
4. It permits wide coverage of subject matter and therefore eliminates unessential ideas and principles.
5. It helps the learner to get a grasp of the total field, thus bridging the gap between related subjects.
6. The comprehensive knowledge it provides serves as a good entry behaviour for further studies in the affected subject areas.
7. It offers greater flexibility in choice of content than the subject-centred curriculum.

Weaknesses of the Broad-Fields Curriculum Design

1. It has been criticised as sacrificing depth of content to breadth as it lays emphasis on coverage of broad areas of knowledge.

2. It gives the learner an overview or generalization of knowledge and subject matter and this does not make for active learning and active inquiry.
3. When the subjects are fused, learners do not appreciate the logic and structure of each discipline as these tend to disappear.
4. It is more difficult to implement than the subject-centred curriculum when the human and material resources demands of it are considered.
5. It does not encourage specialisation especially when we consider the fact that society has a great need for specialists in various fields that are expected to contribute to human and material development of the society.

CHAPTER SEVEN

CURRICULUM ORGANISATION

Meaning and Need for Curriculum Organisation

Curriculum design is equated with curriculum organisation (Hasegawa, 2014). After the selections of content and learning experiences, they remain unorganized until they are harnessed, organised and integrated for effective instruction in order to achieve predetermined instructional outcomes. This is the need for curriculum organisation.

According to Wheeler (1967), curriculum organisation is simply the way of arranging action-steps directed towards a goal. Ughamadu (1992) furthered this definition by emphasising that curriculum organisation is the systematic process of arrangement of content and learning experiences in a way that they will reinforce each other, and have pronounced influence on the effectiveness and efficiency of instruction and the level of achievement of pre-specified curriculum objectives. In another view, curriculum organisation is the arranging or ordering of content and learning experiences in such a way that they support and reinforce each other, produce a cumulative effect and result in desirable learning outcomes (Obasi, 2009).

Research and experience have shown that when objectives are determined, and content and learning experiences are selected and well organised based on well-defined principles, we can precisely predict the kind of changes in behaviour that are likely to occur. Hence, curriculum organisation involves some identification and

grouping of ideas, consolidating and application of the principles of learning. Curriculum organisation is therefore, a crucial task in curriculum development.

Kinds of Curriculum Organisation

In designing a curriculum, we take into consideration its organisation. The organisation can be in a vertical form or horizontal form. According to Reyes (2000), vertical organisation refers to the longitudinal arrangement of content as reflected in the presence of sequence, continuity, and vertical articulation in the curriculum. On the other hand, horizontal organisation refers to the arrangement of content, skills and processes from the viewpoints of scope and horizontal integration. Therefore, vertical organisation and horizontal organisation are the two types of curriculum organisation.

Vertical Organisation of the Curriculum

This refers to a situation where the content and learning experiences in a subject area studied in Form One, for example, is related to the content and learning experiences studied in the same subject in Form Two. It is a relationship over time within the same discipline or subject area. This organisation facilitates the depth and breadth of coverage as well as ensuring the consolidation of knowledge acquired in a particular subject area over a period of time. It provides the learner with a prerequisite knowledge for subsequent tasks in the discipline which makes learning less stressful, less laborious, and raises reaction rate.

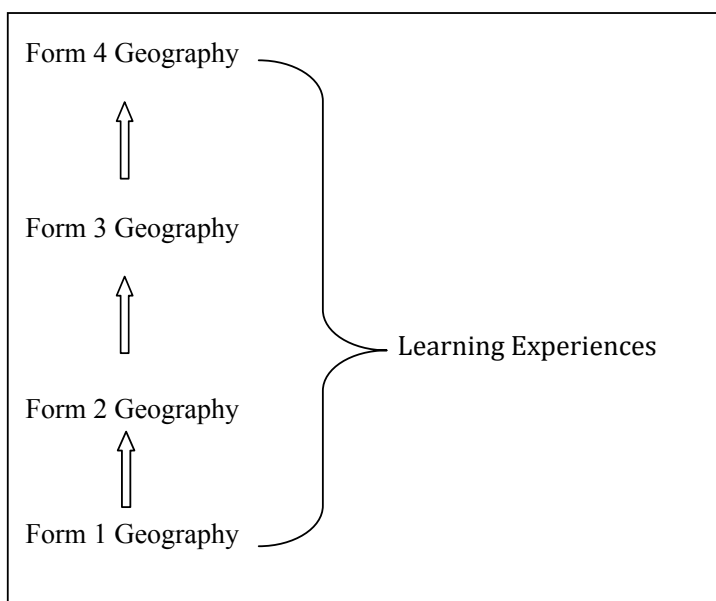


Figure 7: Vertical Relationship of Learning

Horizontal Organisation of the Curriculum

This allows the content and learning experiences of what is learnt in another subject area to be related to what is learnt in another subject area at a given level of education. An example is when we consider the relationship between Form One physics and Form Two mathematics. The importance of horizontal relation is that it facilitates the reinforcement of knowledge from one subject area to another. It also enables learners to see knowledge as inter-related and not compartmentalised. Compartmentalised learning occurs when learning experiences are unrelated.

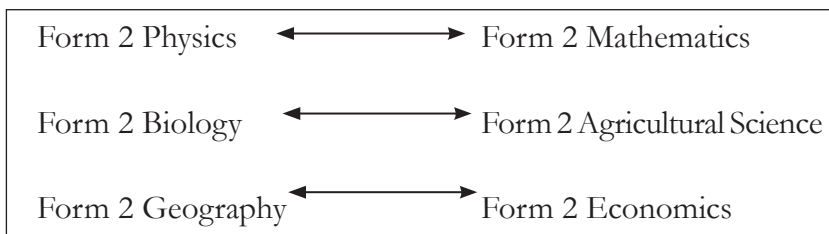


Figure 8: Horizontal Relationship of Learning

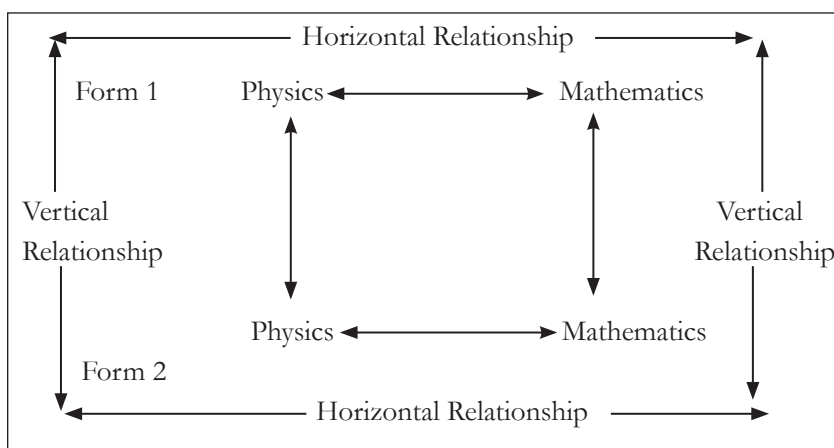


Figure 9: Vertical and Horizontal Relationships of Learning

From Figure 9, if the learning experiences in Form One of a subject (e.g. physics) are related to experiences in Form Two of the same subject, we refer to it as *Vertical Relationship of Learning Experience*. However, when the learning experiences in Form One of the same subject are related to experiences in another subject (e.g. mathematics) in the same class, we refer to it as *Horizontal Relationship of Learning Experience*.

Principles for Sequence in Curriculum Organisation

The major principles for sequence – series of order in curriculum organisation – as opined by Obasi (2009) include the following:

- *Moving from simple to complex:* The first principle is that which proceeds from the simple to complex. The simple is defined as that which contains few elements or subordinate parts, as a one-celled organism in biology, for example, is simpler than a many-celled organism.
- *Expository order based on prerequisite learning:* This principle is followed particularly in subjects like physics, grammar and geometry involving laws, theorems and principles. These laws, theorems and principles are organized in such a way that the mastery of one facilitates the comprehension of the next one.
- *Moving from whole to part:* This principle is mainly adopted by mathematics and geography. In mathematics, learners start from whole numbers to fractions.
- *Moving from art to whole:* English language adopts this principle. For example, learners master words and vocabulary first before they begin to make simple sentences.
- *Chronology:* History, literature in English and philosophy of education adopt this principle. Here, facts, events, trends and ideas are arranged in a time sequence so that presentation of later events is preceded by the discussion of earlier ones.
- *Reverse order of chronology:* History, religious knowledge, and literature in English adopt this principle. It employs the technique of tracing events, trends, facts and ideas from their present perspective to their earliest times.
- *From concrete to abstract:* Learners need to be presented with experiences and opportunities to see, touch, taste, hear, or smell before asking them to verbalise and categorise a phenomenon. In dress making and fine art for example, learners start by using

concrete objects as models before they can begin to design or create their own concepts.

Criteria for Effective Curriculum Organisation

The basic criteria that guide effective curriculum organisation of content and learning experiences are:

- *Continuity:* This involves the systematic repetition in the provision of opportunities that will enable learners internalize the concepts being taught. It stresses the importance of continuum in education generally. The implication of this is that learning experiences should not be broken at any point in the learner's lifelong educational career.
- *Sequence:* This means the building of each successive experience on the preceding one in such a way that enough coverage within a particular subject area is achieved. It involves arranging ideas in logical order.
- *Integration:* This refers to the horizontal interrelationship of learning experiences and content. It stresses the orderly presentation of materials in such a way that learners develop unified perspectives of issues focussed upon. Integration also refers to the utilization of curriculum elements from one subject area to another subject area of the curriculum, so that they buttress one another.
- *Scope:* This refers to the range of important ideas, concepts and principles to be learnt, and/or the level of mental and other competencies to be cultivated by the learner who is exposed to the programmes. In choosing the scope, the following factors need to be considered: philosophy of education, nature and characteristics of learners, subject matter, current trends in the society, textbooks and other instructional materials, culture of the school environment, the timetable, demands by examination bodies, and the teacher's competence.

CHAPTER EIGHT

CURRICULUM IMPLEMENTATION

Meaning of Curriculum Implementation

Curriculum implementation is the translation of the curriculum into action. It is the utilisation of what has been recommended, i.e. putting curriculum into practice and ensuring that it is effectively being used. In the same line, Amadi (as cited in Mbakwem, 2005) defines curriculum implementation as the stage of curriculum process and system whereby all the relevant curriculum inputs are brought into direct contact with the learners through a wide variety of activities so that learning experiences and mastery can be maximized at a minimal cost. In brief, curriculum implementation is the task of translating the curriculum document into the operating curriculum by the combined efforts of the learners, teachers and others concerned.

Curriculum implementation is really a continuous process. It involves conveying new ideas about the curriculum, and giving in-service training to teachers to equip them effectively for the task of implementation. In addition, it involves the diffusion of curriculum materials, provision of instructional resources, and utilisation of the curriculum (Osuji & Suleh, 2015). If the educational system of a nation is careless about the needs of the society and those of the learner, it is likely to pose a threat to the productivity of that nation. It is not enough to have a curriculum; it is most important that the curriculum relates and adequately takes care of the entire societal aspirations. This is why all planned and unplanned learning

experiences of the learner under the auspices of the school and the society need to focus on the sustenance of the learner and the transformation of the society (Osuji, 2017).

Curriculum Implementation Process

According to Kamau and Changilwa (2013), curriculum implementation is a continuous process which involves the following:

- *Dissemination:* This involves conveying new ideas regarding the curriculum in order to prepare people to consider and agree on the proposed change. It helps teachers and educators and officers of education at all levels to own the curriculum without resistance.
- *Staff development process:* This refers to giving in-training service to teachers and other staff so that they are effectively equipped to implement the curriculum.
- *Diffusion:* This refers to the means used to ensure that teachers utilize the curriculum materials. This can be achieved through the syllabus, conferences and workshops, mass media, examinations, using textbooks approved by subject panels, and orientation of the general public.
- *Provision of instructional materials, facilities and equipment:* This needs to be adequate in form of books, laboratories, workshops, and power (electricity).
- *Introduction of necessary organisational changes:* This involves provision of new quality assurance officers or field officers and trained teachers. In addition, the timetable needs to be re-organized to reflect the new changes.
- *Instituting appropriate changes in patterns of examinations and assessment:* This assists in evaluating the set objectives.
- *Utilisation of the curriculum:* This is the most important stage and

it requires continuous support through, for example, provision of materials and training programmes. The curriculum is used, monitored, feedback provided, and necessary changes made.

Agents of Curriculum Implementation

Agents of curriculum implementation simply mean the stakeholders in the curriculum. They are the people involved in translating the planned and unplanned learning experiences of the learner into action. They include the following:

- Teachers
- Quality Control and Standards Officers (QASOs)
- Curriculum Development and Research Centres
- Employers (e.g. Teachers Service Commission)
- National Examination Bodies
- Faculties of Education at the Universities
- Teachers Unions
- Teachers Advisory Centres (TAC)
- Parents Teachers Association (PTA)
- Non-Governmental Organisations (NGOs)
- Professional Associations

Factors Enhancing Curriculum Implementation

There are several factors that enhance the implementation of the curriculum. Among them are resource materials, administrative support, teacher effectiveness, and the learner as a precious resource.

1. *Resource materials:* A successful implementation of the curriculum is dependent on the availability of and effective utilization of appropriate learning resources. The importance of learning resources in a teaching and learning situation cannot be over-emphasized. They offer reality of experience, motivate learners,

and stimulate self-activity on the part of the learners and this keeps them busy and active, hence productive learning ensues.

2. *Administrative support:* Effective teaching and learning cannot be completely successful without administrative support at all levels. Administrative support can be given by:
 - a) Providing adequate financial resources.
 - b) Providing learning opportunities.
 - c) Providing support such as expertise, time and learning resources.
 - d) Disseminating information.
 - e) Facilitating communication at all levels.
 - f) Providing support to teachers in the area of in-service training.
 - g) Developing ways for teachers to network and share ideas.
3. *Teacher effectiveness:* Teachers play a pivotal role in successful curriculum implementation. To be real actors or effective and motivated implementers of curriculum, they should be knowledgeable and have mastery of the subject matter of each lesson. They ought to possess psychological and emotional competencies, acquire a repertoire of teaching skills and methodology. They also need to exhibit proficiency in diagnosing learners' learning difficulties and classroom management for their own benefit and that of the learners.
4. *Learner as a precious resource:* The curriculum is planned for the learners. They are the most precious resource, not for use, but for moulding. This means that the curriculum is planned to meet the social, intellectual, physical and integrative needs of the learners. Learners are expected to participate actively in the teaching and learning process and feedback is expected from them in order to ascertain the achievement of educational goals.

Factors Militating Against Effective Curriculum Implementation

We have drawn attention to the factors that enhance the effective implementation of the curriculum. Nevertheless, there are also some factors that hinder the effective implementation of the curriculum. Among these variables are:

1. *Teacher factor*: This deals with the quantity, quality and variety of teachers handling our classroom interaction process. Some of our teachers also are not role models. This affects the effective implementation of the curriculum especially in the area of value transfer to the learner.
2. *Shortage and unavailability of resources*: Effective implementation of the curriculum is dependent on the presence of adequate resources and support. However, in most countries in Africa today, teachers have indicated that the biggest impediments to curriculum implementation are lack of high quality learning resources to support classroom instruction, and lack of time to study the guides.
3. *Insufficient finance*: Lack and insufficient finance is one of the problems of the education sector in most African countries. Curriculum implementation involves a lot of money for equipment for both the teacher and the learner.
4. *Lack of administrative support*: The goodwill of the administration enhances curriculum implementation. The actualization activity of a curriculum is also based on the recognition that curriculum documents and initiatives become meaningful only when they become part of a school community. In doing this, the school communities should have administrative support in terms of adequate financing, provision of facilitating instruments such as expertise (personnel), learning opportunities and resources, time, and communication channels at all levels and feasible policies.

5. *Learners' inertia and lack of interest:* In most African countries, many young males and females are becoming too lazy to engage themselves in academic pursuits. They seem to lack interest as a result of the new wave of getting money easily even with limited education. A participatory approach to teaching and learning demands a high level of involvement and commitment on the part of the learners.
6. *Socio-economic and political variables:* The economy of any nation reflects on the educational system which in turn is reflected on the country's school curriculum. A nation whose economy is poor and/ or unstable may not be in a position to provide the necessary teaching and learning facilities. Similarly, power and politics in the society affect curriculum implementation. An unstable political system does not augur well for effective curriculum implementation.

CHAPTER NINE

EDUCATIONAL RESOURCES IN CURRICULUM

Concept of Instructional Resources

The role of educational or instructional resources in curriculum implementation cannot be over-emphasized. This is because they carry out a vital responsibility in the attainment of educational goals. Instructional resources can be referred to as curriculum materials, educational materials, resource materials, instructional media and learning resources, among others. They are designed to promote and encourage an effective teaching and learning process.

Instructional resources are those educational materials and resources put into use by the teachers in the teaching and learning process in order to influence learning positively. This implies that all those materials employed in the process of teaching and learning for the purpose of optimal service delivery and the attainment of the educational goals are known as educational or instructional resources.

Instructional resources help learners to acquire skills, gain information, improve cognition processes or even increase item level of maturity in physical, emotional, or value areas. They also help in focusing attention and monitoring learners. They include resource persons, charts, diagrams, maps, mock-ups, slides, films, projectors, models, television, radio, books and many others.

Classification of Instructional Resources

Instructional resources are classified into three major categories.

1. *Visual materials*: These are types of teaching aids or instructional materials that involve the use of the sense of sight. They comprise of printed and non-printed materials. Examples of printed materials are maps, charts, textbooks, magazines, journals, newspapers, teachers' handbooks, learners' workbooks, reference books and transparencies. Examples of non-printed materials include the chalkboard, whiteboard, flannel board, models, mock-ups and realia.
2. *Audio materials*: Audio resource materials like radio, tape recorders, voice recorders and mobile phones represent those teaching and learning materials which help the learner to acquire knowledge through his or her auditory senses.
3. *Audio-visual materials*: These materials involve the use of the senses of hearing and seeing. They provide a better impact in the teaching and learning process when compared to audio or visual aids individually. Examples of audio-visual materials include television, computers, tablets, iPads, smart phones, projected electronic materials such as projectors, slides, films and PowerPoint presentation.

Criteria for the Selection and Use of Instructional Resources

The extent to which resource materials facilitate teaching and learning activities and consequently the attainment of the lesson objectives depends on the adequacy and appropriateness of materials selected. This in effect means that learning resources are not selected haphazardly. The following criteria will enable the teacher select materials that will enhance the teaching and learning process.

1. *Relevance of the material*: The resource materials to be selected

must be relevant to the objectives. It must be relevant to the learner for whom the materials are to be used. There is need to consider the age, level of attainment or maturation, interests, needs, ability, aspirations, aptitude, and capability of the learner.

2. *Appropriateness to the learner and objectives:* The content of the resource materials must not be too difficult for the learner's age and level of attainment. The content must also relate to the learner's interests, experiences, and socio-economic background.
3. *Availability of resource materials:* Before the teacher decides on materials to use, he or she must be certain that they are available and accessible to him or her and the learners.
4. *Quality:* Resource materials should be attractive, durable, portable and clear, accurate, and useful in terms of illustrations, drawings and paintings. They should not be too heavy for ease of handling and storage.
5. *Cost:* The resource materials need to be cheap, but without compromising quality.
6. *Learner characteristics:* The teacher should select and use resource materials that will enhance learners' active participation and interaction in teaching and learning activities.

Importance of Instructional Resources in Teaching and Learning Process

The usefulness of instructional resources in the teaching and learning process cannot be downplayed. Apart from being a core in the 21st century classroom interaction, the following are some of their relevance to the teaching and learning process.

- a) They provide a meaningful source of information in a learning situation.
- b) They extend the horizon of experience of the learners.

- c) They stimulate learners' interests in a variety of learning activities.
- d) They overcome the physical difficulties of presenting certain subject matter, e.g. by the use of multi-media.
- e) They supply a concrete basis for conceptual thinking and make learning more permanent.
- f) They enhance transfer of learning.
- g) They promote pace learning.
- h) They reduce excess verbalism and increase teacher's efficiency.
- i) They promote acquisition of interpersonal skills as teachers and learners work cooperatively in building up a large collection of learning materials.
- j) They enrich the teaching and learning environment and provide a suitable and challenging learning experience.

CHAPTER TEN

CURRICULUM EVALUATION

Concept of Curriculum Evaluation

Curriculum evaluation is seen as a phase in the curriculum process. However, it is not the terminal phase. This is because presently, we view curriculum process as dynamic, cyclic and continuous, as the feedback from evaluation is cycled back into the process. Curriculum evaluation therefore is used to check the effectiveness of the various components of the curriculum. More so, the efficacy of the whole curriculum in attaining the objectives as stated.

Crowbach (1963) defines evaluation as the process of ascertaining the decision areas of concern, selecting appropriate information and collecting and analysing information in order to report summary data useful to decision makers. In support of this definition, Mkpa (1987) opines that curriculum evaluation entails the examination of all the components or elements of the curriculum; the objectives, learning experiences, content, pattern of organization of the content, and learning experiences and the evaluation. According to Ughamadu (1992), evaluation is conceived as the process of determining the nature and extent of these changes in the behaviour of learners after being exposed to a particular curriculum.

When we evaluate, we want to judge the worth or merit of something. An evaluation of the curriculum is an evaluation of the educational goals to find out how far they satisfy the needs of the society. Curriculum evaluation may be regarded as a process

of gathering information to be used in making educational decisions. In a nutshell, we can define curriculum evaluation as the collection, analysis, and reporting of information concerning its effects with a view to making judgement about its feasibility and educational values.

One of the prime needs for evaluation is to provide feedback to the learners at frequent intervals, which helps to improve their performance. It also helps the teachers to know again at frequent intervals how successful they are achieving their teaching objectives. Emphatically, we can conceive evaluation as a systematic process of determining the extent to which the learners have achieved the stated instructional objectives.

Types of Evaluation

There are basically two types of evaluation in respect of curriculum evaluation. These are:

- Formative Evaluation
- Summative Evaluation

Apart from the formative and summative evaluation, there is also *diagnostic evaluation*. This is presumed to be the first form of evaluation because it looks at needs analysis. It determines the direction of change in the curriculum. It truly brings out the strengths and weaknesses of the areas of the curriculum that need concentration before the actual development of the curriculum.

Formative Evaluation

Formative evaluation serves as feedback and guide. It influences the shaping of a curriculum through revisions of the development phase. Its main purpose is to ensure that the learning experiences are related to the laid down objectives.

Formative evaluation simply refers to curriculum evaluation at the planning or development stages of a curriculum. It is an

on-going and continuous process, i.e. guidance-oriented because it helps to identify the learners' strengths and weaknesses. The essence of formative curriculum evaluation is to ensure that the curriculum being planned is fine-tuned to increase its chances of success.

Strengths of Formative Evaluation

- The feedback information is used as an input to improve the programmes further before final adoption.
- It helps, as much as serves as an indicator as to whether the teachers are moving in the right direction as regards the stated objectives.
- It provides immediate feedback to the learner, the teacher and the curriculum expert as regards the learning successes and failures.

Summative Evaluation

This type of evaluation is also known as *terminal evaluation* or end of programme evaluation. It is used mainly at the end of a programme or exercise for the purposes of retention or abandonment. It is concerned primarily with evaluating the overall programme after it has been in operation. It focuses on the appraisal of the curriculum in its final form.

Summative evaluation focuses on the overall effectiveness of a programme that has been fully planned and implemented. It is used to determine the extent to which the instructional objectives have been achieved by the learners at the classroom level and is used primarily for assessing course grades or for certifying mastery of the intended learning outcomes.

Strengths of Summative Evaluation

- It is used for grading or the certification of learners.
- It provides information for judging the appropriateness of course objectives and the effectiveness of instruction and therefore the curriculum.
- The results from summative evaluation are used by policy makers to make decisions on the continuity of a programme, promotion of learners to a new class, termination or replacement of a programme.
- Data from summative evaluation could be used for, among others, programme revision, for formulating new programmes, adding or dropping courses of instruction, changing instruction strategy, selecting new content, or revising goals and objectives of a programme.
- Summative evaluation shows the quality of performance of learners in the programme through various forms of measurement or evaluation.
- It helps to determine if the objectives of the programme have been achieved.
- It provides information on the effectiveness of the programme.

Criteria for Effective Curriculum Evaluation

In order for the curriculum evaluation to perform the necessary evaluation functions, it should have certain characteristics. Some of these characteristics or criteria are as follows:

1. *Consistency with objectives:* A good programme of evaluation must have an intimate relationship with the objectives specified for the curriculum. There is need for consistency among the purposes, teaching procedures and the evaluation procedures adopted.

2. *Comprehensive in scope:* The three domains of learning: the cognitive, affective and psychomotor domains are to be emphasised in the statement of objectives as well as in their evaluation. Comprehensiveness of evaluative programmes suggests the use of varied instruments. Any curriculum evaluation demands the development of evaluative techniques to determine not only the current state of attitude and values towards the curriculum, but also the achievement of a successful programme.
3. *Validity:* Validity here refers to the extent to which the evaluative instrument measures what it intends to measure. The validity of an evaluative instrument ensures that evaluation is not only appropriate, i.e. consistent with programme objective, but is also based on an objective analysis of the behaviour to be evaluated.
4. *Reliability:* This means consistency of result. A test is reliable to the extent that it is consistent with itself, that is, ranks the individual in essentially the same position on successive application. Reliability is the degree to which the curriculum evaluation results are the same when they complete the same task on two or more different occasions.
5. *Unity of evaluative judgement:* The criterion of unity of evaluative judgement requires that evaluation of learners in cognitive, affective and psychomotor domains of learning must represent a reasonably related and unified pattern of the learners' development.
6. *Diagnostic value:* This criterion demands that the evaluator must identify inherent strengths and weaknesses in the individual as well as recommend appropriate remedial measures.
7. *Continuity:* Evaluation must be a continuous process and must form an integral part of curriculum development, and classroom instruction. It should begin with a diagnosis at the beginning of the adoption of any new programme or innovation,

and continue through its development and in whatever tests are considered appropriate at the conclusion.

Instruments for Curriculum Evaluation

There are many instruments that can be used for evaluation, particularly evaluation of learners' achievement of curriculum objectives. While some instruments can be used to evaluate cognitive, affective and psychomotor objectives, some are appropriate for evaluation of any one or two of the domains of learning. Here, we need to limit this discussion to classroom assessment instruments.

Since the goal of assessment according to Boston (2002) is to gain an understanding of what learners know (and do not know) in order to make responsive changes in teaching and learning, techniques such as teacher observation and classroom discussion have an important place alongside analysis of tests and homework; hence, continuous assessment. It is worth to mention that one of the characteristic features of continuous assessment is that it is comprehensive. This implies that the learner is assessed in all domains of human behaviour, i.e. the cognitive, affective and psychomotor domains (Bloom, 1956).

In the Nigerian educational system for example, continuous assessment was introduced in 1982 for the assessment of learners at all the levels of the educational system (Azuka, 2014). In this system teachers are to evaluate the learners using written tests, assignments, projects and other assessment instruments during the course and at the end of the term or session. The continuous assessment given during the course accounts for about 30–40 per cent, while the end-of-term assessment accounts for 60–70 per cent of a learner's scores. This gives teachers the opportunity to monitor and assess the learning progression of the learners in class.

Since continuous assessment is guidance oriented, the skills of teachers in test construction and administration and record

keeping cannot be over-emphasized. This implies that teachers are expected to construct valid and reliable tests which could be used in all schools following established procedures and practices of test construction. In doing this, teachers need to consider all the domains of learning – the cognitive, affective and psychomotor – in order to work towards the comprehensiveness of assessment.

Adetayo (2014) in his academic paper on “Assessing the affective behaviours in learners”, observed that many a time in assessment, teachers relegate the affective domain to the background. With this therefore, he recommends that teachers should assess the affective outcome in learners as this will enable learners not only to acquire academic competencies but to be adequately equipped with knowledge, skills, attitudes, values, practical and psychosocial skills that would enable them live healthy and satisfying lives and derive the benefit of learning. Assessment of learners involves varieties of instruments as demonstrated in Table 1 as follows:

Table 1

Assessment Instruments and the Learning Domain Assessed

Instruments	Cognitive Domain	Affective Domain	Psychomotor Domain
Tests	✓		
Projects	✓	✓	✓
Assignments	✓	✓	✓
Observation	✓	✓	✓
Rating Scales		✓	✓
Anecdotal Records		✓	
Interviews	✓	✓	
Checklist		✓	✓
Questionnaire	✓	✓	
Sociometric Technique		✓	

Functions of Curriculum Evaluation

Curriculum evaluation has several important functions as outlined below:

- a) It reveals the strengths and weaknesses of learners who experience the curriculum.
- b) Evaluation results provide useful information for objective guidance and counselling of each learner.
- c) Evaluation helps teachers to clarify their objectives.
- d) Evaluation increases learners' motivation for learning and encourages formation of good study habits.
- e) Evaluation results help the teacher to monitor the effectiveness of teaching methods and materials, select experience, diagnose learning difficulties and guide learning in order to ensure the effectiveness of teaching and learning.
- f) Evaluation helps policy makers, principals and teachers to take decision on learners in respect of classification, selection or promotions.
- g) Evaluation results are used for placement of learners depending on their levels of cognitive, physical and social development.
- h) Evaluation gives evidence to policy makers for a change of the school curriculum.
- i) Evaluation helps curriculum planners and teachers to check the validity of the basic hypotheses upon which the curriculum has been developed and organized.
- j) Evaluation provides teachers with objective and detailed information on each learner, which is reported in writing or orally to parents.

Models of Curriculum Evaluation

According to Okpala and Onocha (1994), an evaluation model is expected to provide answers to the following questions:

- i. How best should evaluation be defined?
- ii. What should be the purpose of evaluation?
- iii. What should be the duties, authorities and responsibilities of an evaluator?
- iv. What is the relationship between evaluation and programme objectives?
- v. What is the relationship between evaluation and decision making?
- vi. What types of evaluation are to be involved?
- vii. What criteria are to be used in judging evaluation studies?

A number of curriculum evaluation models have been articulated by educationists. Below are the three major approaches or models of evaluation that have become dominant in the field of evaluation.

1. Ascertaining the achievements of desired outcomes: e.g. Ralph Tyler's Evaluation Model.
2. Assessment of the merit of an entity: e.g. Michael Scriven's Formative and Summative Evaluation Model.
3. Decision-oriented approach: e.g. Stake's Model, Stufflebeam's Model, and Provus' Discrepancy Model.

Ralph Tyler's Evaluation Model

Tyler (1949) proposed a model in which he emphasized that educational evaluation should be geared towards ascertaining the achievement of desired outcomes. He conceptualised educational evaluation as a process of determining to what extent the educational objectives are actually being realized by the programme of

curriculum and instruction. Figure 10 depicts the diagrammatic representation of his model.

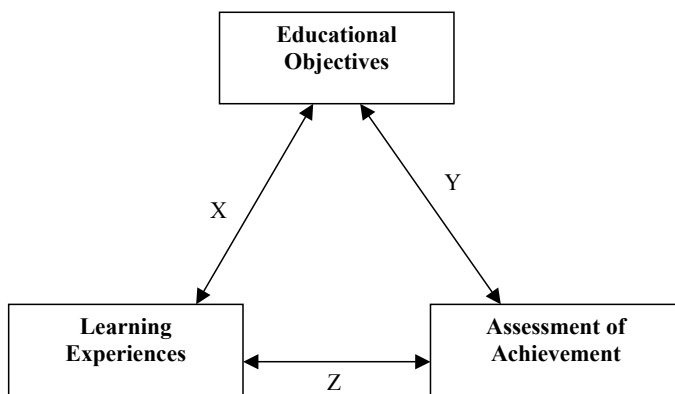


Figure 10: Ralph Tyler's Curriculum Evaluation Model

Evaluation under this model is represented by Y. It consists of testing individual learners or groups of learners on the content of an educational programme to which they have been exposed. The justification for this is to ascertain the extent of achievement of the desired outcomes. Certain educational objectives have been stated and as a result of formal learning experiences, certain desired outcomes have been expected. Evaluation does pose the question: Does the learner, after being exposed to the educational programme, habitually respond in the desired ways? Has the learner actually acquired the desired knowledge, facts, values, skills, attitudes, beliefs or interests?

This model equally shows that there are other possible relationships in the entire curriculum development that may be subject to evaluation. The arrow X shows the relationship between educational objectives and learning experiences. The purpose of evaluation in this linkage is to ascertain whether or not the learning experiences chosen were suitable for attaining the educational

objectives. More so, whether or not other learning experiences, perhaps, would have been more suitable.

The arrow Z refers to the relationship between the actual learning experiences and learners' achievement. In this case, evaluation may be interested in finding out what actual learning experiences produce what learning outcomes. Furthermore, whether a different sort of learning experience would have produced better learning outcomes either from one or all the learners.

Weaknesses of Tyler's Model

- It does not take into account of unplanned or unintended outcomes or events.
- The information by tests is too narrow to constitute a sound and comprehensive basis for judging the merit or worth of the total programmes.
- The information generated by the model is terminal as it is of little direct use for the improvement of a programme.
- It does not pay attention to the process variables in the implementation phase or to the examination of the antecedent conditions that affect or determine the success of the programme.
- There is very little provision for evaluating the educational objectives themselves.

Merit of an Entity Model

This model is associated with Michael Scriven. Scriven (1967) named this model as the formative and summative evaluation model. In this model, questions are posed on the merits of a programme during the process of its development, and also after the process of development of the programme has been fully completed. It is important to note that this model emerged on

the basis of some criticisms of Tyler's model; drawing from the weaknesses of Tyler's model.

A fundamental premise of the formative and summative model is that to derive maximum benefit from resources invested in programmes, one needs not wait till the end of the programme implementation so as to determine if the programme is successful or not. Rather, it would be better if one can ensure that the programme attains optimum or maximum success by also conducting evaluation at the implementation stage. This would most likely highlight the challenges that need to be removed. Based on this, appropriate modifications made in the implementation of the programme will help assure the success of the programme.

Scriven's Model emphasised that the evaluation of any educational programme should:

- focus on values, i.e. on direct assessment of worth
- require a professional evaluator who, depending on the role evaluation is expected to play, could be an insider interested in and working towards the efficient development of the programme. Alternatively, he or she could be an objective outsider whose major task is to summarize the merit of a completed programme at least for the benefit of the consumers.

Whether the role of evaluation is formative or summative, the evaluator should first ascertain the suitability of the programme objectives, before determining whether they are being met. The evaluation report should contain explicitly stated judgements to be used in decision making by either the programme developers or the consumers.

Decision-Oriented Model

According to Okpala and Onocha (1994), this model is associated with Mervin Alkin. He defines evaluation as a process of

ascertaining the decision of areas of concern, selecting appropriate information, and collecting and analysing information in order to report summary data useful to decision makers in selecting among alternatives. This model is the most current model of evaluation, especially for evaluation of programmes.

Several models have emerged out of the decision-oriented model and some relate more to education. These models clearly defined the elements in a programme on which decisions would be made and hence the need for summary data. Some of these models are: Stake's Responsive Model, Stufflebeam's Model, and Provus' Discrepancy Model.

Stake's Responsive Model

Stake (1967) proposes a curriculum evaluation model which focuses on three broad areas. The three areas include: Antecedents, Transactions and Outcomes (ATO).

Antecedents: This refers to prevailing conditions which were in existence prior to the putting in force of the curriculum programme.

Transactions: This comprises interactions and activities which take place during the implementation phase of the programme.

Outcomes: These are the impact of the introduction and implementation of the curriculum programme on all who have a stake to it.

Yoloye (1980) asserts that the elements considered in the evaluation of a primary school science curriculum development programme, for example, include the following:

- The **Antecedent** variables include manpower (quality, qualifications, and predispositions), children's intellectual ability, socio-economic background, and cognitive styles. The antecedent variables also include learning environment which bothers on

school setting, school administration, financial resources and cultural setting. Antecedent is therefore any condition that exists prior to teaching and learning that may influence the outcomes.

- The **Transactions** variables include instructional materials, instructional techniques or strategies, supportive strategies and intervention strategies. These are learning transactions that occur between and among teachers and learners.
- The **Outcome** variables include the effects on the learner, the teacher, parents, curriculum innovators, educational administration and policy, and economic implications. Outcomes are therefore the consequences of education. The consequences of education can either be immediate and long range, cognitive and conative, personal and community-wide. A typical example is a learner's performance in any subject, or a school's general academic achievements in standardised examinations.

A question can be asked: Why Stake's responsive model? Mbakwem (2005) said that Stake maintained that an educational evaluation is responsive if:

- it omits more directly to programme activities than to programme intent
- it responds to audience requirements for information
- the different value perspectives present are referred in reporting the success or failure of the programme.

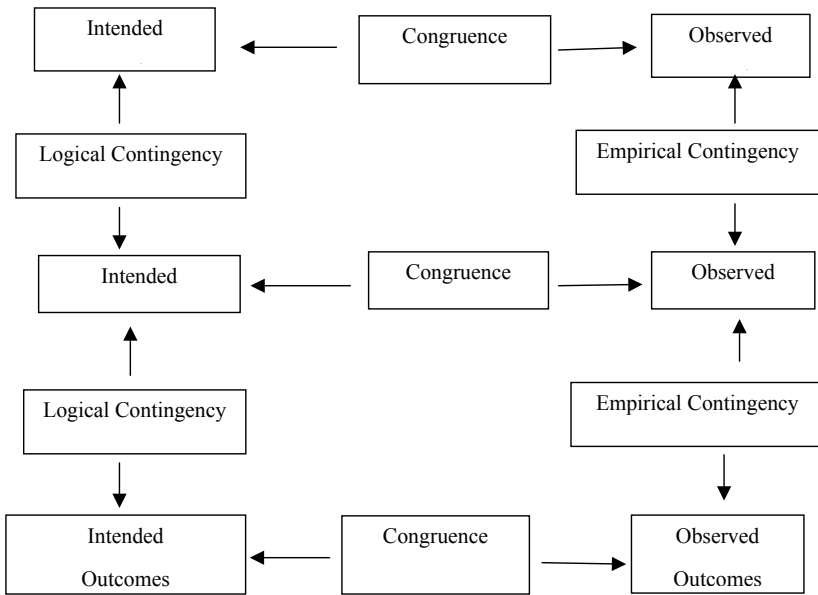


Figure 11: Stake's Curriculum Evaluation Model (Congruence-Contingency Model)

From the discussion of the ATO Model, it would be noted that it is comprehensive. It can also be considered embracing enough as to be adopted in the evaluation of educational programmes. It is important to note that various instruments and techniques such as questionnaires, surveys, tests, or direct observation, can be used with this model.

Stufflebeam's Model

Stufflebeam (1969) established that curriculum evaluation has four essential dimensions as follows:

1. Context Evaluation
 2. Input Evaluation
 3. Process Evaluation
 4. Product Evaluation
- } The CIPP Model

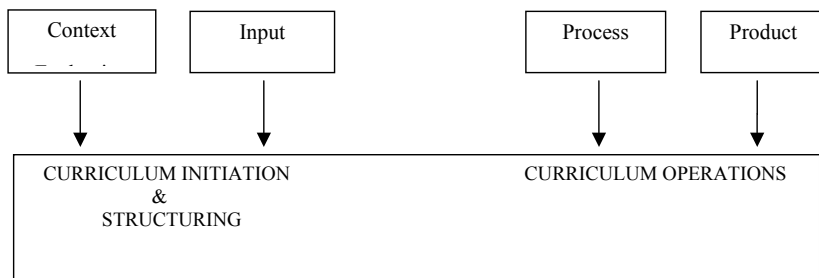


Figure 12: Stufflebeam's CIPP Curriculum Evaluation Model
(Source: Mbakwem, 2005)

In this model, Stufflebeam (1969) opined that firstly, the evaluator is concerned with **context** evaluation in which the aim is to assess the educational context in order to identify the needs and objectives which should be treated. Secondly, the evaluator is concerned with **input** evaluation which is designed to locate alternative instructional sequences that should be adopted. Thirdly, the evaluator is concerned with **process** evaluation which is designed to identify, in process, objects in the procedural design or its implementation. Lastly, the evaluator is concerned with **product** evaluation which is designed to relate outcome information such as, what happens to learners, to objective and to content, input and process information.

Provus' Discrepancy Model

Provus (1971) introduced a discrepancy-oriented evaluation model which is characterised by three broad categories:

- Set curriculum standards.
- Determination of whether a discrepancy exists between set performance and actual programme performance.
- Utilising discrepancy generated data to determine the direction of the curriculum- retention, modification for improvement or total elimination.

According to Provus, if there is any discrepancy, it will be communicated to the decision makers. The decision makers thereby incorporate necessary modifications at every stage. They can consider the following:

- a) Going to the subsequent stage.
- b) Recycling to a previous stage.
- c) Starting the curriculum over again.
- d) Modifying the standard.
- e) Terminating the curriculum.

CHAPTER ELEVEN

CURRICULUM CHANGE AND INNOVATION

Concept of Curriculum Change and Innovation

A school curriculum is intended to provide learners with the knowledge, skills, values and positive attitudes required to lead successful lives. That notwithstanding, a curriculum is also political in the sense that decisions about ‘what is in’ and ‘what is out’ change from time to time depending on political needs and aspirations. A curriculum fundamentally establishes a vision of the kind of society we want in the future, and the kind of people we want in it. It decides what the ‘good life’ is for individuals and society as a whole. As such, it is not always possible for everyone to agree on what a curriculum should be. It could be said that the most significant curriculum innovation should reflect the needs of the learners and the society (Bagchi & Udo, 2010).

Curriculum holds an outstanding place when seeking to promote innovation in education as it reflects the vision for education by indicating knowledge, skills, positive attitudes and values to be taught to learners. It may express not only what should be taught to learners, but also how learners should be taught (Andong’o & Mugo, 2011). Curriculum innovation can include new content, concepts, sequencing, time allocation or pedagogy. It is the aim of the curriculum developers that all schools meet the minimum requirements of the national curriculum. Once a school curriculum is viewed as not able to improve or does not give the best possible

support to learners and personal achievement, then there is always need to do an innovation to the curriculum in use.

Education has to constantly evolve and grow to meet the needs of our ever changing societies. In recent years the pace of change has become very rapid and in certain areas, our education system has struggled to implement the changes needed to keep pace. The changes bring about curriculum innovations in institutions of learning. There is a process that is followed to ensure that the changes made are of benefit to the learners and other stakeholders. Changes in any curriculum are not an individual's affair but involve policy makers and all other key persons in the education sector.

Curriculum renewal is often necessitated by a number of factors such as the desire to change the state or improve the quality of learning in schools. The words 'change' and 'innovation' are often used interchangeably. Change is often caused by technological and economic factors and it happens in a haphazard manner, while innovation happens in a systematic plan, although some of its consequences are unplanned (Obasi, 2009). Curriculum innovation is the means by which we attain the goal of curriculum change, i.e. curriculum change is the goal of curriculum innovation. The result of innovation is change within a system.

Curriculum change is a shift of a curriculum due to perceived need or unforeseen circumstances or external forces. Change refers to those noticeable things that take place between one period to the next, while innovation on the other hand is the deliberate novel, specific change that is thought to be more efficacious in accomplishing the goals of a system. Innovation is a deliberate and systematic process which attempts to improve practice in relation to previously defined objectives. It is the general introduction of a novel factor perceived as new by a given school, supported by a driving force, and implemented as a practical advance that deviates from established or traditional factors.

To innovate is to create something new which markedly deviates from the traditional practices which have been followed for a long time to impart education at all levels. Concretely looking at this, innovation implies the introduction of something new that departs from what has traditionally been known to exist. Innovation is a deliberate, novel, specific change which is thought to be more efficacious in accomplishing the goals of a system. According to Gordon (2012), curriculum innovation can be termed as an introduction of something new that deviates from the standard practice. It refers to new ideas or practices that are different from those that exist in the formal prescribed curriculum. It is a deliberate action to improve a learning environment by adapting a method of presenting material to learners that involves human interaction or hands-on activities and learner feedback. Deducing from these definitions, we can conclude that curriculum innovation entails the introduction of novel ideas and practices in any one part of the curriculum or different parts of the curriculum. It means making the curriculum more relevant to the varying needs and aspirations of the learners, and to the ever changing needs of the society.

Context of Curriculum Change and Innovation

In every day of our existence in this world, many changes occur, and some of them might have an impact to the education systems. Such changes are necessitated by political, social, economic, cultural, technological and ideological environments. Changes in the society provoke changes in the school curriculum since a school is a social institution serving the society. Changes occur in the curriculum so that it can adjust to the economic, technological, social, political and ideological needs in the society. On the other hand, when a curriculum is too much prescribed, incoherently arranged, or overloaded with content, it can lead to demand of innovation.

The education system changes in order to address these emerging needs and demands. In most of the developing countries, curriculum reforms have been influenced by political factors. A typical example is the case of Kenya during the colonial era where curriculum was stratified along racial lines with separate curriculum for Europeans, Asians, and Africans. This saw African education characterised by limited access, low allocation of education revenue, selective and punitive public examinations; a racial biased school curriculum and technological factors.

In Nigeria for example, religion, politics, culture, economic and technological changes have played major roles in the context of change and innovation in the primary and secondary school curriculum. The emergence of information and communications technologies (ICTs) has necessitated change in our knowledge society today. This is because ICTs are regarded as potent tools in reducing poverty, extending health services, expanding educational opportunities and generally, improving the quality of life. ICTs and education are critical for development and for securing employment in a knowledge society. However, the potential of ICTs in education can only be realised when it is embedded in a social context that is open to innovation and supported by a favourable policy environment.

Approaches to Curriculum Change

The education system changes in order to address the emerging needs and demands of the society. The need to change established practices in order to address existing problems spurs stakeholders on in change and innovation of the curriculum. Change can occur in the following forms:

- *Substitution:* In this change, one element replaces the one in use, e.g. replacing an old edition with a new edition of a core textbook in school.

- *Alteration:* This occurs when a change is introduced into existing material in the hope that it will appear minor and thus be readily adopted, e.g. introducing new context such as road safety in the primary school curriculum.
- *Perturbations:* These are changes that are disruptive but teachers adjust to them within a fairly short time, e.g. changing a school timetable to allow for longer teaching time.
- *Restructuring:* These are changes that lead to modification of the whole school system, e.g. inviting the local community in deciding what is to be taught, or introducing an integral curriculum that requires team teaching.
- *Value orientation:* These are shifts in the fundamental value orientation of school personnel. If, for example, the new teachers who join a school place more emphasis on personal growth of learners than academic performance, then the value orientations or fundamental philosophies of the school changes.

Process of Curriculum Change and Innovation

In order for change and innovation to succeed, the strategies for implementing the curriculum must be considered carefully. According to Ughamadu (1992), the process of curriculum change and innovation follows the following steps:

1. Identification of the area that needs change and then agreement on the need for change.
2. Identification of the direction of change. This means thinking out new objectives which invariably implies having one or more new practices (innovations) that will most probably meet the identified needs.
3. Organization of workshops whereby relevant curriculum materials are produced and teachers and other personnel on the innovative practice are trained.

4. Field testing and evaluation of new practices.
5. Dissemination and adoption of the innovation.
6. Evaluation.

Based on these steps, there is need to consider some factors in planning and executing change. One of the factors to consider is the change agent. Change agents include teachers, school heads, and the Ministry of Education. Innovation is another factor to be considered. This involves executing the change itself, i.e. putting it into use or operation. The next factor is the user system. This relates to the person or group of people at which the innovation is directed. Lastly, time is an important factor to be considered. Innovation is a social process, which takes place over a period of time.

Need for Curriculum Innovation

The reasons for curriculum innovations as were emphasised by Obasi (2009) include the following:

- *Social change:* The society is dynamic and the society's values, beliefs, purposes, ideas and aspirations determine what should be included in the curriculum.
- *Utilisation of research findings:* Research findings are used to solve educational problems. Fundamental researches are usually undertaken by learners as a precondition for graduation. Furthermore, the findings of their research may be used to enrich the knowledge already existing in a field of study.
- *The dynamic nature of knowledge:* Knowledge is ever changing. New knowledge has brought about new concepts, new methods, new stock of information, new strategies of enquiry and teaching that demand new skills, programmes, approaches and devices in learning/teaching process. This calls for curriculum innovation.

- *Increase in facilities that facilitate teaching and learning process:* A lot of developments in science and technology exert great pressure on education and learning process. Thus, school curriculum is very much influenced by profound changes in the content of education, in addition to ways of organising learning.
- *Feedback from evaluation:* Evaluation assesses the effectiveness of the curriculum, the teaching methods, the resource materials utilized and the level of performance of the learners. Information from a systematic evaluation programme helps in decision making concerning whether to add or drop anything from an existing curriculum, or change the curriculum entirely.
- *Reports about learners from child-study movements and psychologists:* Learners change in their physical, emotional and mental capabilities. As they develop, the curriculum should change to accommodate these changes in them.
- *Change in the objectives of education:* If there are changes in the objectives of education emanating, for example, from change in the social values, beliefs, needs, aspirations, etc., there may be a change in the content of the curriculum to encompass the changes in the corresponding objectives.

Models of Curriculum Change and Innovation

Tanner and Tanner (1975) emphasised three principal models which illustrate how change takes place. These are as follows:

Research, Development and Diffusion Model (R, D and D)

In this model, the idea or practice is conceived at the central planning unit and then fed into the system. The model is effective where curriculum development is done on a large scale and ideas have to reach large geographical areas and isolated users.

In the logical sequence of activities using the R, D and D model, first there is a basic research by a central project team which develops new curriculum devices and designs prototype materials. This is followed by field trials of the prototype materials and designs where necessary, mass production of the modified prototype materials, and mass dissemination or diffusion of the innovation through courses, conferences and workshops.

Finally the implementation of the innovation is done by the users, that is, schools.

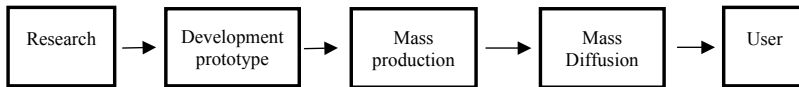


Figure 13: Research, Development and Diffusion Model

Social Interaction Model (Periphery to Periphery Model)

Social Interaction Model operates through social interaction and emphasizes diffusion of messages from person to person. Change in this model proceeds through formal or informal contacts between interacting social groups. The model stresses the importance of interpersonal networks of information, opinion leadership, personal contacts and social interaction. It is based on awareness of innovation, interest on the innovation, trial, and adoption for permanent use.

Problem Solving Model

The Problem Solving Model is based on assumption that an innovation is part of a problem solving process. The model has the following characteristics: identification of a need, the need translated into a problem which is then diagnosed, diagnosis leads

to search for solutions, possible solutions are evaluated, and lastly the innovation is implemented.

This model is also referred to as *periphery centre approach to innovation* whereby innovations are improved, generated and applied by the teachers and schools on the basis of their needs. The receiver is actively involved in finding an innovation to solve his or her own unique problem.

Challenges of Curriculum Change and Innovation

While innovation is seen as providing a positive change, sometimes the process of implementation of the innovation can be problematic and teachers encounter various problems in trying to implement curriculum reforms and educational policies in schools. The following are some of the challenges inherent in curriculum innovation.

- *Problems of extra workload:* It is obvious that the introduction of a new dimension to an already existing order often brings about increased workload as staff put in additional hours to gain a better understanding of the new ideas.
- *Lack of confidence:* The resultant misunderstanding and disagreement (if any) from the problem of extra workload soon develop into lack of confidence and confusion which may generate anxiety in those who implement the change and suspicion of the motives behind the new idea. It would be difficult to carry out innovation if the consumers have any doubts about its desirability.
- *Problem of finance:* Change takes time and money. Substantial amounts of money can be required for retraining of staff and recruitment of new staff, and acquisition of educational resources.
- *Lack of clarity about innovation:* Lack of understanding and uncertainty about an impending change when combined with

personal insecurity, breeds rumours that can induce a state close to panic among those whose collaboration is essential to successful implementation.

- *Non-involvement of implementers in decision-making and actual development of the curriculum:* Teachers are key agents in curriculum innovation. They may develop negative attitudes towards curriculum innovation when they are not involved in the decision-making process and development of curriculum and curriculum materials; and such a situation may not promote curriculum innovation.
- *Lack of in-service training of teachers:* An innovation may call for new knowledge, new skills, techniques, understanding and other abilities which some teachers may not possess. The knowledge gap becomes a problem in curriculum innovation. Curriculum developers therefore need to organize in-service training, workshops, seminars and conferences for the training and retraining of the teachers who are to implement the innovation.
- *Lack of incentives for implementers:* If an innovation is to succeed, adequate and appropriate incentives should be provided for those who are to implement it.
- *Unclear objectives of innovation:* If the objectives of innovation are not clear especially to the implementers, the innovation may not achieve the desired result and this could be a barrier to innovation.
- *Lack of resources:* Innovation requires additional resources. Four main kinds of resources are required and these are time, material resources, administrative support, and expertise.
- *Conservation of curriculum implementers:* Many teachers and administrators are often suspicious of innovation. Their attitude could militate against any innovation.

Factors for Successful Curriculum Change and Innovation

In order to successfully implement curriculum change and innovation, we need to consider the following factors:

- a) *Research*: There is need to research widely to ensure changes are suitable, necessary and appropriate to meet learners' needs.
- b) *Knowledge*: There should be a shared understanding of the reasons and need for innovation where it should be made clear why change is necessary and its intended benefits.
- c) *Leadership*: Strong leadership should be put in place at all levels to support innovation and that everyone involved understands clearly the rationale for it.
- d) *Objective*: There is need to have clear vision underpinned by an understanding of the current education thinking, national and international practice.
- e) *Cost*: There is need to control implementation and development costs tightly so that the innovation gives good value for money.
- f) *Professional development*: There is need to provide high quality professional development and support, matched closely to the requirements of the innovation and the needs of staff.
- g) *Focus*: There is need to maintain a clear and consistent focus on ensuring that the innovation is integral to teaching and learning, as well as sustainable.
- h) *Commitment*: Implementers need to be committed and enthusiastic and appreciate the opportunities they are being given, through the innovations, to develop professionally.
- i) *Evaluation*: There is need to undertake rigorous and regular evaluation, based on clear criteria, focusing on the impact on learners' achievement, standards and personal development, and use the outcomes to adjust the new approaches.
- j) The innovation should, above all, be relevant, feasible, compatible, non-threatening, beneficial, flexible and adaptable.



PART TWO

CHRISTIAN EDUCATION

**Patristic And Marist Education,
Marist Education Style, And Sustenance of
Marist Pedagogy**

CHAPTER TWELVE

PATRISTIC AND MARIST EDUCATION

Introduction

The beginning of human beings marked the beginning of education. It evolved and developed in history and embraced the educational values from other cultural integrity (Majawa, 2014). In emphasising the need of education, Osuji (2008) recalled the words of St. Marcellin Champagnat, the Founder of the Marist Brothers of the Schools as follows: “How happy would I be if I could teach and devote my life to the education of children and young people” (p. 4).

Education of the whole person seems less favoured today. Subjects and disciplines are taught, but often a focus on the whole rounded person seems to have less priority. The Marist educator in the footsteps of the Church Fathers tries to collaborate with God in bringing to completion the work of God, with revealing to the learner who he or she is and who they are for God. He collaborates with the learner in this work because he cannot do it without the consent and participation of the learner in his or her own development. He forms the learner’s heart, character and virtue. He does this by providing the learner sufficient knowledge of religion and teaching him or her to live in harmony with his or her neighbour. He realises that education has to be rounded or risk imbalance, or even doing damage to the learner.

What would happen to a learner if nothing but his or her ability to assimilate knowledge was taken into account? If the formation

of his or her heart and his or her feelings were omitted? If in each one the capacity were not developed to deepen his or her inner life to reach within himself or herself to what most draws him or her closer to God? This is the reason education is a collective work where numerous forces and people are at work, primary among them, family, school, church, and the government.

Concept of Patristic and Marist Education

Patristic and Marist education are both Christian education based on character formation and self-reliance in order to bring transformation and development into the society. They are rooted in their heavenly Founder, Jesus Christ, who is the Way, the Truth and the Life (John 14:16, The African Bible). The Kingdom of God is God's intention for creation. It is the central theme and purpose in the preaching and life of Jesus the Christ (Mk. 1:15). Therefore, when an educational activity is intended to sponsor people towards Christian faith, the ultimate purpose of such education is the Kingdom of God in Jesus Christ (Groome, 1981).

Etymologically, the word 'Patristic' is from the Latin word "Pater", meaning Father. It is simply about the Church Fathers, that is, the early Christian writers. Marist comes from the French word "Mariste", from "Marie"; Mary the Virgin and Mother of Jesus Christ. It was used first in the 19th century denoting a member of the Society of Mary; Marist Fathers or Sisters, or a member of the Little Brothers of Mary; Marist Brothers of the Schools. The word education also comes from the Latin word "Educare", which means to lead out (Groome, 1981). Education is therefore seen as a process whereby an individual acquires knowledge, skills, values and attitude for a positive change of behaviour in order to bring development to the society.

With regard to the etymology of Patristic, Marist and the definition of education, how do we therefore define Patristic and Marist Education? Patristic Education as defined by Majawa (2014) is:

A quality, holistic and value-oriented education for all in the dynamic rhythm of life defined by early Church Fathers based on Christ's teaching which was defined, developed and interpreted in the Church's intellectual tradition, magisterial propositions with discerned consideration of historical righteous classical paideia for the advancement of informative, formative and transformative encyclopaedic knowledge and witnessing of an individual and society for the highest common good and whose teachings and experiences are relevant today. (p. 30)

Marist Education is a Christocentric and Anthropocentric reality that informs, forms and transforms the educand in the way of Mary, the Mother of God. Both Patristic and Marist Education have a common denominator; Divine Wisdom. They are both founded on Christian principles. These Christian principles help the learner to be an authentic witness in the society, and to be sure of his or her eschatological promises.

Marist Education in the Light of Patristic Education

The contributions of patristic wisdom to world education cannot be downplayed. The early Church Fathers, for example, Clement of Rome, Origen, Basil, Augustine, Jerome, Thomas Aquinas, and John Chrysostom, played a vital role in establishing what education needs to be in the light of Divine Wisdom. According to the Apostolic Constitution, *Sapientia Christiana* of the Supreme Pontiff, Pope John Paul II, on Ecclesiastical Universities and Faculties:

Christian wisdom which the Church teaches by divine authority continuously inspires the faithful of Christ zealously to endeavour to relate human affairs and activities with religious values in a single living synthesis. Under the direction of these values all things are mutually connected for the glory of God and the integral development of the human person, a development that includes both corporal and spiritual wellbeing. (Mvumbi, n.d, p. 6)

The Church Fathers never minced words when they talked about education to be qualitative, holistic and value-oriented in order to inform, form and transform the educand. The need for this is that education is expected to instil in the educand values, knowledge, positive attitudes, and skills. This will help the educand to grow in the fear of God and respect of people.

As Majawa (2014) explicitly expressed: “Patristic Education explores the continuous chain or evolution of knowledge and transformational experiences from God which began to be revealed at creation and passed through various cultural worldviews, philosophies, theologies and praxis reaching its highest revelatory expression in Jesus Christ” (p. 47). This rightly supports the teachings of St. Thomas Aquinas that education is a cyclic chain that starts from God and lives forever, adding value to the educand and assuring him or her of the eschatological realities.

The outstanding holiness of life of the Church Fathers, their life of prayer, witness and commitment to the Christian teaching in the footsteps of Christ, coupled with their intellectual prowess is worth emulation by Christian educators today. It is also a challenge to Marist educators in a special way due to the fact that Patristic education teaches about the sacredness, nobility, vocation and mission of authentic and credible teachers who walk righteously before the Lord and humanity.

Following the early Church Fathers who “appreciated the Greek classical *paideia* and transformed it in the light of the Scriptures,” (Majawa, 2014, p. 158) the Marist educator today, in the words of St. Clement of Rome, need to have a cultured school setting where there is adequate teaching of Christian principles, which forms part of the transformative education and protective force given to learners who share in education that is Christ, in order to help them fight ignorance of self, society, God and destiny.

CHAPTER THIRTEEN

EVOLUTION OF MARIST EDUCATION

Foundation of Marist Education

The Nineteenth Century France has often been described as a divided society due to the revolution. The revolution created patterns of opposition between bourgeois and aristocrat, and State and Church. This was the time that St. Marcellin Champagnat, the founder of the Institute of Marist Brothers of the Schools was born. He was born on 20th May, 1789 at Le Rosey, a hamlet near Marllhes in France. He was baptised the next day, the feast of the Ascension (Furet, 1989).

During the revolution, schools were often closed. Marcellin's aunt, Sr. Louise Theresa of the Sisters of St. Joseph, who was sent out of the convent due to the revolution, took the pain to teach him the rudiments of reading and writing at home. Marcellin was educated and formed to piety by his family. Furet (1989) opined that constantly surrounded by good example, Marcellin became a pious and docile child, endowed with great purity of soul. Piveteau (as cited in McMahon, 1992) stated that the revolution achieved nothing very definitive in the field of education. Nevertheless, it initiated several steps which were important to Catholic schools and which still influence the French system of education.

When the local school re-opened, Marcellin went back to school, but he had an unpleasant experience. It happened that on his first day in school, the class teacher slapped a pupil who took Marcellin's place to read aloud for the class. The teacher's unjust treatment

shocked him and he decided not to return to school again and took solace in taking care of the family sheep in the village. At the age of fourteen years, when Marcellin was called to become a priest, he went through the rigorous formation to the priesthood. This was with difficulty due to his academic background. Farrel (as cited in McMahon, 1992) posited that Marcellin bitterly regretted not having a school education in his early youth, suggesting he contrasted his academic shortcomings with the outstanding intellectual talents of his father.

In any case, Marcellin began to feel God was assigning him a task to found a group of teaching Brothers. On 22nd July 1816, he was ordained a priest at the age of twenty-seven years old. It was here that two of his exceptional companions in the seminary, Jean-Marie Vianney and Jean-Claude Collin and some others, decided to found the ‘Society of Mary’ that would include Priests, Sisters, Brothers and other people – men and women – who were willing to work together for the Christian education of the youth under the banner of Mary (Osuji, 2008).

On October 28th, 1816, an event took place that convinced Marcellin he must immediately set about the founding of a teaching congregation. Farrel (as cited in McMahon, 1992) demonstrated that Marcellin had been to a carpenter’s home in Les Palais, a hamlet near La Valla, where a seventeen year old boy, Jean-Baptiste Montagne, lay seriously ill. When Marcellin asked him about God, he replied, “God? Who is that?” Marcellin spent two hours instructing him in the basic Christian beliefs, heard his confession, and prepared him to die in good dispositions. A few hours later, the young boy died and this pushed a button in Marcellin in founding the Institute of the Marist Brothers of the Schools on the 2nd of January, 1817 for the Christian education of the youth, especially the less privileged.

First Marist Schools

Led by the Spirit, Marcellin was seized by the love that Jesus and Mary had for him and for others. His experience of this, as well as his openness to events and to people, was the wellspring of his spirituality and of his apostolic zeal. It made him sensitive to the needs of his times, especially to the ignorance concerning religion among young people and the poor circumstances in which they were placed. His faith and eagerness to do God's will led him to realize that his mission was to make Jesus Christ known and loved. He often said: "Every time I see a child, I long to teach him his catechism, to make him realize how much Jesus Christ has loved him" (Marist Brothers of the Schools, 2011, p. 17). It was this attitude that led him to found a teaching institute for the Christian education of the young, especially those most in need.

The first Marist schools came under the jurisdiction of the University of Lyon and were initially run only during winter. This was to enable the children work with their parents on the farms during the warmer weather. Such family labour was simply a requirement for survival. Table 2 presents the first Marist schools.

Table 2

First Marist Brothers' Schools

Year	Location	Teachers	Learners
1818	La Valla	2 Brothers	80
1819	Le Bassat	1 Catechist	30
1819	Marlhes	2 Brothers	100
1820	St. Sauveur	2 Brothers	100
1822	Bourg-Argental	3 Brothers	200
1822	Tarentaise	2 Brothers	60
1823	Vanosc	2 Brothers	80
1823	St. Symphorien	3 Brothers	150
1823	Boulieu	3 Brothers	120
1824	Chavanay	2 Brothers	100
1824	Charlieu	3 Brothers	200

Source: McMahon (1992)

During the last fifteen years of his life (1825–1840), Marcellin's work became widely appreciated. He was renowned for his prudence and courage in training young men to become zealous and effective teachers. At the time of his death, on the 6th June 1840 to be precise, there were 280 Marist Brothers teaching in 48 schools in France and Oceania, with a total enrolment of 7,000 students (Thomas as cited in McMahon, 1992).

From their roots in Lyons, the Marist Brothers of the Schools today have spread across the globe. Over their 200-year history, they have had ministries in over 100 different nations. Presently, there are approximately 3,500 Brothers in 79 countries on five continents; Europe, Africa, the Americas, Asia, and Oceania. They are working directly and sharing their mission and spirituality with more than 40,000 lay Marists. More so, they are educating close to 500,000 children and young people.

Contemporary Saint for the Youth

Marist Brothers have a lot to learn from their revered founder. He was a man who had difficulty with learning but established a congregation of teachers. He was a man of hard work, exceptional determination and action. He was also a man of prayer who found it as easy to be recollected in the streets of Paris as in the countryside of La Valla. He was a man who took the Church as a family, the family of God, and of Mary, Mother and prophetic witness to the goodness of God.

In 1896, Pope Leo XIII decreed Marcellin ‘Venerable’, and in 1955, Pope Pius XII presided at the ceremony which proclaimed him ‘Blessed.’ On the 18th April, 1999, Pope John Paul II declared him a ‘Saint.’ Marcellin’s life is a wellspring of hope to the Marist Brothers with regard to how they handle their learners. They handle their learners with love, but steeped in hard work and formation of character for positive development in the society in the way of Mary, the Mother of God.

CHAPTER FOURTEEN

STYLE OF MARIST EDUCATION

Introduction

Throughout the history of religious life, religious institutes have developed their educational philosophies. This accrues from both the accumulated educational wisdom of the Church and the accepted contemporary secular practice of the time. Marcellin chose to combine teaching and evangelisation; that when training his young Brothers to teach, he focused first on religion. He taught his Brothers the contemporary devotional practices of religious people of France, many of which centred on Mary.

Marist style of educating is based on a vision that is truly holistic and that consciously seeks to communicate values (International Marist Education Commission, 1998). A Christian and Marist educator accepts teaching as a vocation and witness. Marist Brothers are called to achieve their holiness or wholeness through their response to the call God makes of them to be teachers and educators in a Christian Catholic school – Marist school, to be precise.

Following their Father founder, St. Marcellin Champagnat, they believe that to bring up children properly, you must love them and love them equally. This is always a clarion call for Marist education, which has a very distinctive approach to the Gospel. From the principle above flow the special characteristics or style of Marist Education.

Characteristics of Marist Education

According to the International Marist Education Commission (1998), the following are some characteristics of Marist Education:

- Presence
- Love of Work
- Simplicity
- Love of Work
- Family Spirit

Presence

The educational pedagogy of presence is of paramount importance if you really want to give a quality, holistic and value-oriented education grounded in Christian principles to your learners. Marist Brothers' commitment to presence calls them to take time and make time for their learners, above and beyond the normal demands of professional contact. They always establish relationships with both individuals and groups founded on love, creating an atmosphere in which learning is enjoyable and conducive to inculcation of values and personal growth. The Marist Brothers immerse themselves in the lives of the young people, knowing their world and meeting them in their own space and culture (International Marist Education Commission, 1998).

It is worthy to note that the Marist Brothers in their school ministry are always present to their learners in all their activities, for example lessons, sports, leisure, cultural activities, spiritual activities, and free time. In being present to them, the Marist Brothers always make sure that their presence is neither oppressive nor laissez faire. The Marist Brothers are prudent, firm, respectful and vigilant, and always willing to advice their educands for smooth personal growth and for transformative lifestyle.

Furthermore, the Marist Brothers are attentive, welcoming and listening, and always engage their educands in dialogue. This aims

to earn the trust of their educands and encourage their openness. Their relationships with their learners are not possessive, but many a time, develop into mature friendships that last for many years.

Critically examining this culture of presence of the Marist Brothers to their learners, we come to appreciate the life of Jesus Christ as expressed to us in the Gospels. The Marist Brothers are actually responding to the invitation of Jesus Christ in the Gospels in their school ministry. It is vital to note also that in the Gospels, Jesus was the one who immersed himself in the lives of the people of his time and place. He ate and drank with them, walked among them, and shared their lives. He was at home with a wide range of society from the outcasts, prostitutes and tax collectors, to the well-heeled Pharisees. More so, his public acceptance of children was quite uncommon in his time: “Allow the little children to come to me” (Mt. 19:4, Lk. 18:16, Mk. 10:14). This is a cry which has echoed down the centuries, a call which is still being heard by teachers everywhere around the world, especially with the Marist Brothers of the Schools.

Simplicity

The Marial virtues of humility, modesty and simplicity are part and parcel of the spirituality of the Marist Brothers of the Schools. As the International Marist Education Commission (1998) emphasised:

Our simplicity expresses itself primarily through contacts with young people that are genuine and straightforward, undertaken without pretence or duplicity. We say what we believe, and show that we believe what we say. Such simplicity is the fruit of a unity of mind and heart, of character and action that derives ultimately from our being honest before ourselves and before our God. (p. 44)

Drawing from the above assertion, it is interesting to note that the Marist Brothers, being aware of their limitations and potential,

are more likely to understand their learners and respect their dignity and freedom. This simplicity is also expressed in the teaching method of the Marist Brothers and in their organizational structure. Many a time, they try as much as possible to avoid anything that is showy or superficial. Their lifestyle, especially their ‘unrecognized’ vocation in the Church says it all. They adopt simplicity as a precious value and offer it to their learners as a way of doing things. Based on this, they help their learners to value themselves and others for who they really are, and not because of their earthly possessions and fame.

This simple lifestyle of the Marist Brothers is likened to Jesus Christ in the Gospels who stood honestly not just before his Father, but also before the people. He had no time for those who trumpeted their good works before all, rather, his favour fell upon the widow who gave her penny to the treasury (Lk. 21:1–4, Mk. 12:41–44), and the publican who stood at the back of the temple and was embarrassed to be there (Lk. 18:10–14). Finally, Jesus spoke to the people in terms that they could understand, for example the mustard seed and the lost sheep (Mt. 13:31–35, Mk. 4:30–34, Lk. 13; 15:1–7).

Family Spirit

St. Marcellin Champagnat’s great wish was that the Marist Brothers should relate to each other and to their learners as members of a loving family instinctively do. In his last Will and Testament, he said:

It is my wish dear Brothers that the same charity that must bind you to one another as members of a single body, should embrace all the other congregations. Oh, I implore you by the boundless love of Jesus Christ, cast out of your hearts all envy of everyone, and especially of those whom God calls like yourselves to the Religious State, to labour for the education of youth. (Marist Brothers of the Schools, 2011, p. 166)

As in a good family, the Marist Brothers share life with its successes and failures; set clear standards of honesty, mutual respect and tolerance; show their learners that they believe in their goodness, not confusing their persons with their actions when they make mistakes. The Marist Brothers are always ready to trust, forgive and reconcile with their learners.

In Marist schools, the Marist Brothers always discourage assembly line production attitudes and results orientation, and encourage sustainable learning. However, they give preferential attention to the learners whose needs are the greatest, especially those who are most deprived and those who are going through hard times in their cognitive, psycho-social and spiritual lives.

Family spirit was the core in Jesus' ministry. He chose to live his public life with a group of men and women who were his apostles and disciples. While he was their teacher, he also shared their bread and fish and wine. Moreover, while he could not call any home his own, he was at home with this group of men and women with whom he chose to share all he had.

Love of Work

One of St. Marcellin Champagnat's most distinctive characteristics was hard work, as well as total confidence in God. He had passion and love for hard physical work, but he never substituted this for his complete confidence in God.

The Marist Brothers emulate their Father founder in a special way with regard to love of work. In their school ministry, they always carefully prepare their lessons and other educational activities. There is thorough correction of assignments, planning and evaluating their educational programmes and giving extra time to those in need. They extend this love of work to their learners by encouraging them to be conscious of the dignity of work, and to believe that work can be a powerful means of self-fulfilment. More

so, that work gives purpose and meaning to life and contributes to general economic, social, spiritual and cultural well-being of the society.

The Marist Brothers often acknowledge the tragic reality of unemployment in the society today and try to provide assistance to their learners through sustainable learning. This enables them to maintain their dignity and self-esteem. Through being models to these young ones, they try to help them develop a strong character and a resilient will, a balanced moral conscience, and solid values on which to base their lives. They help them to make good use of their time and talents, to develop a sense of teamwork and of being socially cooperative and sensitive. In doing this, they try to emulate Jesus who was at the beck and call of the people he served, and who also went round doing good by preaching the Good News, healing the sick and casting out demons.

In the Way of Mary

The International Marist Education Commission declares that: “Mary is for us the perfect model of the Marist educator as she was for Marcellin. As a woman and lay person, and Jesus’ first follower, Mary inspires our personal faith. As the educator of Jesus at Nazareth, she inspires our pedagogical approach” (p. 47). Mary had to make a journey in faith, to discover her role in this world and in the scheme of life. She did it with the same struggle and confusion that almost every Christian does and with the same journey of faith. She knew the hardships of travel, dispossession and alienation, embarrassment at her predicament.

Mary as a mother had the role of educating her son, assisting him to find his own way and purpose in life. She did this with Joseph within a family context which provided the unity and love that is necessary for all growth. As her son came into adolescence, she gave him the space he needed to discover and establish his own

identity. Jesus getting lost in the temple provoked misunderstanding (Lk. 2:41–52), but Mary and Joseph gave the boy their trust and continued to foster his maturity in wisdom, age and grace.

For the Marist Brothers, Mary is both their model and ‘Good Mother.’ In their teaching approach, they always encourage their learners to love and honour Mary, to follow her tenderness and her maternal strength, and her constancy in faith. This is explicitly expressed in their motto: “All to Jesus through Mary, and all to Mary for Jesus” (Marist Brothers of the Schools, 2011, p. 19).

Marist Values in Reality

The five characteristics of Marist education underpin the Marist understanding of and approach to Christian education. The question here is: how are these values lived out in reality, in practice? A Marist school is a centre of learning, of life and of evangelization. It is a community and especially a community of faith in which hope and love are communicated.

Marist schools are places where the Christian educators strive to make Jesus known and loved by the educands. Consequently, Marist Brothers show their learners that they are not only their teachers, but that they are also their brothers. This is exemplified in the family of Nazareth where Jesus was nurtured by Mary and Joseph.

To the Marist Brother, brotherhood symbolized first the family spirit existing among the Brothers and those who work, or have contact with them. Second, brotherhood symbolized the way the Marist Brothers live together in a community. Third, brotherhood symbolized the spirit in which the Marist Brothers make an option for the poor. By trying to establish in the Marist school this spirit of brotherhood, the Marist Brothers strive to help their learners become responsible for their own formation by developing their intelligence through knowledge of self, of others and of God, and so to grow in values; hence, sustainable learning.

CHAPTER FIFTEEN

MARIST BOARDING SCHOOLS

Introduction

The starting point of Marist pedagogy is God. Marist pedagogy is child-centred. With Marist pedagogy the lay staff and parents of the learners collaborate with the Brothers in such a way that the school atmosphere reflects a true family. The guiding attitude of a Marist educator is love rooted in faith because the ultimate aim of Marist education is to prepare young people for the formation of the heart and the transformation of the society.

St Marcellin's educational philosophy emphasises comprehensive education of the child. This consists of education of the head, the heart, and the hand, which means imparting knowledge (cognition), stimulation to love (affective or emotional development), and being equipped for action (conation, i.e. developing the mental will to act). All this is subsumed in the primary aim of making the child a good Christian and a good citizen. This will enable him or her to be an agent of love and a worthy citizen for bringing development in the society, and a candidate for heaven. The Marist formation of the learner is mostly done in an environment conducive to teaching and learning. This environment is the boarding school environment.

Effective Management of Boarding School System

The dormitory is the home for Marist learners for a period of six years as in the case of many Marist African schools. Learners

spend most of their adolescent stage in school. The adolescent stage is a very critical stage in the learner, that if he or she is not guided properly, he or she may be carried away by the euphoria of this stage and get involved in all sorts of deviant acts. Based on this therefore, the Marist Brothers sacrifice their comfort and spend most of their time with the learners. They are often called ‘babysitters’ by the parents and lay staff members. They do this in order to ensure sustainable learning in the learners.

The following are some tips on how the Marist Brothers in most African administrative units effectively manage the boarding system:

- a) Marist Schools are often co-educational and boarding.
- b) There are dormitories for boys and dormitories for girls.
- c) The Brothers’ Community is always between the boys’ dormitories and the girls’ dormitories.
- d) The dormitories are fenced and they have gates.
- e) At the instance of giving learners admission letters, they are also given learners’ handbook on how to live Marist family life in the dormitories.
- f) In the dormitories, learners live according to their class level, i.e. the dormitories are divided according to class groups.
- g) Each dormitory has a name of a saint or Marist patrimony, which the learners of that particular dormitory are required to maintain the spirituality of the saint.
- h) There is a full time hostel mistress for the girls and a full time hostel master for the boys. These staff members live with the learners. Their apartments are attached to the dormitories. Their duty is to maintain family spirit among learners and they are the liaison officers with the school management, especially, the Dean of Students’ Affairs (a Brother).

- i) There are also prefects (from the senior class) who are hostel captains or dormitory guards. They live in the hostel with the students. Every dormitory has a dormitory guard. The main duty of the dormitory guard is to animate the life of the dormitory and make students be at home. They work directly under the supervision of the hostel master and mistress. These dormitory guards are assisted by the class prefects of each class group.
- j) The Brother, who is the Dean of Students' Affairs, often visits the dormitories of the boys and the girls to ascertain the general living conditions of the students and reports to the Brother Principal. He sometimes prays with them during their prayer times.
- k) The Brother in charge of the students' feeding also visits the main kitchen and the dining halls of the students to establish how they are being fed, and the quality and quantity of the food given to them. He is answerable to the Brother Principal.
- l) The dormitories have double-bunked beds. In the dormitories, there is always enough space and ventilation for healthy living.
- m) Students are not allowed to share beds in order to avoid the issues of gay relationships and lesbianism that are rampant in the contemporary boarding schools.
- n) Students are always encouraged to make their beds with white bed sheets immediately they get up.
- o) Students clean the dormitories on daily basis.
- p) Inspections are done in the dormitories every Monday, and the cleanest dormitory is given an award.
- q) Students are not allowed to have any electrical appliances in the dormitories in order to avoid electrical challenges, e.g. a fire outbreak.

- r) Students are often in their school uniforms or dormitory outfits. There is no room for mufti in the school or dormitory environment, except games wear or night wear, which are also Marist customised.
- s) Visitors (including parents, siblings and other teachers) are not allowed in the dormitories.
- t) Students are not allowed to go to staff quarters. This is because the staff can easily take advantage of the students.
- u) There is zero provision (biscuits, sugar, milk, etc.) in the school. Students are well fed and are given snacks in between meals. This helps to maintain the family spirit and fight undue competition. Every student is treated equally and with love.
- v) Students deposit all their pocket money with the bursar in order to checkmate stealing. They withdraw a specific amount of money on a weekly basis, when the need arises.
- w) Prayer is compulsory for all students regardless of one's faith. Girls pray in their dormitory prayer ground, while boys pray in their own prayer ground. They only come together at Mass in the main chapel. Animation of prayers is the prerequisite of the prayer prefect.
- x) Games are also compulsory for all students. During games, all dormitories are locked. Dormitories are always locked when there are activities outside the dormitory – classes, games, prayers, manual labour, etc.
- y) Girls have their full school functionaries and boys have theirs. However, they collaborate for the effective management of the school.

Boarding System and Educational Goal

Running a boarding school system is rewarding. It enables the administrators of the school to achieve the educational goal of

the nation. Here, you are sure of the holistic education you give to the learners. The learners live together and do things as a family. The boarding system enables learners to be time conscious and manage their time effectively. It gives them the opportunity to be self-confident and take up leadership roles easily.

The Marist boarding system in a special way gives learners the ample opportunity to develop their cognitive, social, emotional, and spiritual lives properly. Learners take charge of what goes on in their lives and consult their teachers and the school management only in more difficult situations. Learners are easily helped because the teachers and the administrators are always at their beck and call.

However, managing a boarding school is quite challenging. This is because your presence and commitment are needed all the time if you truly want to achieve your aim. It is time and energy consuming, but fulfilling. That notwithstanding, the boarding school system is always a beacon of hope for Marist educators because it sustains the learning of the students and enables them to implement what they learnt in the wider society.

CHAPTER SIXTEEN

SUSTENANCE OF MARIST PEDAGOGY

Concept of Marist Pedagogy

Chapter Fourteen of this book has discussed at length the characteristics of Marist education such as: presence, simplicity, family spirit, love of work, and in the way of Mary. These are Marist pedagogical approaches to teaching and learning. But how is this pedagogy sustained to achieve its aim in forming conscientious, self-reliant and transformation oriented learners? Sustenance of Marist pedagogy implies that Marist pedagogy is an effective educational approach which is in use; otherwise, it could have been abandoned. Marist pedagogy is more of an attitude than a technique.

Pedagogy means the art or science of teaching. Art is used here in the sense of human creativity developed into a skill by means of study and experience. Science, as it is also used here, means knowledge gained by systematic experimentation and analysis. With this understanding of pedagogy, Marist pedagogy may be defined as a creatively developed skill in teaching, which the Marist Brothers achieved by systematic experimentation and analysis of teaching and learning in general with regard to education of children, modelled on the lifestyle of the Virgin Mary, and following the footstep of St Marcellin Champagnat (Osuji, 2015).

Drawing from the key words of this definition, creatively developed skills mean that Marist pedagogy is purposely developed. Systematic experimentation and analysis means that Marist peda-

gogy is thoroughly researched on before being implemented. Marist pedagogy was the product of a creative faith-directed educator, St. Marcellin Champagnat, who was not only conversant with the signs of the time, but also attentive to the immediate needs of the people around him.

St. Marcellin Champagnat could have been inspired to develop Marist pedagogy by his childhood experience of witnessing the brutality of a class teacher on a school pupil. The experience of physical abuse Marcellin's teacher meted on an impetuous child who usurped timid Marcellin's opportunity to answer a question in class on Marcellin's first day in school, could have been the basis of Marist pedagogy. Based on his faith in God, Marcellin saw the need to take proper care of innocent children who were at the mercy of the merciless cultural influences of his time. Therefore, the sustenance of Marist pedagogy today depends on how much Marist educators are aware of the needs of the youth and the changes that have taken place and are still taking place in the society.

Biblical Background of Marist Pedagogy

St. Marcellin Champagnat understood very deeply how much the Lord cherishes children. Marcellin took very seriously the words of Jesus Christ that says: "Let the children come to me, and do not prevent them; for the kingdom of heaven belongs to such as these" (Matt. 19:13–14). Marist pedagogy is a child-centred education. Marcellin's aim was to use school not only as an evangelisation ground for children, but also as a haven for preserving their innocence. In fact Marcellin wanted the Brothers to act as guardian angels to the children under their care. Seen as rooted in the Bible, implementation of Marist pedagogy requires faith, hope and love.

In emphasizing the words of St. Marcellin Champagnat about the spiritual implication of Marist pedagogy, Osuji (2015) opined:

To educate a child, it is not enough to teach him reading, writing and other branches of primary instruction. This would be enough if he were made for this world only; but a higher destiny awaits him; he is created for heaven, for God; and it is for God and for heaven that he must be educated. To educate a child, therefore, is to make him know this and sublime destiny, and furnish him with the means to attain it; in a word, to educate a child is to make him a good Christian and a good citizen. (p. 6)

The last lines of this extract indicate the ecclesiastical and national dimensions of Marist education: Marist education produces good Christians and good citizens. Marist pedagogy is aimed at making education child-centred with emphasis on the development of the whole person, which consists of developing the spiritual, human and cultural aspects of the child. Spiritually the child needs to have a deep faith in God. Humanly he or she needs to have a mature personality, and culturally he or she needs to be a good citizen. A child so formed has received an integrated education and it is hoped that he or she will actively contribute to the building of the society.

Custody of Marist Pedagogy

The Marist Brothers of the Schools, being the extension of St. Marcellin Champagnat, are the immediate recipients and custodians of Marist pedagogy. Marist Brothers are also the promoters and propagators of Marist pedagogy. It is the responsibility of the Marist Brothers to educate Marist lay educators in Marist pedagogy, first by their lived examples in the school, and also through organized seminars and workshops.

The Brothers have access to Marist documents that contain elements of Marist educational philosophy and, therefore, stand a better chance of updating and improving on Marist pedagogy to match the new culture of the present New Age. It behoves all

Marist Brothers to ardently desire to found anew the congregation today to meet the needs of young people of today. The re-founding spirit will impel the Brothers to appreciate the importance of Marist pedagogy in today's knowledge society.

What could be the ground for applying Marist pedagogy? The educational reality in most parts of sub-Saharan Africa today seems impoverished. This is because most schools focus on certificates and not on character formation (Osuji, 2017). The educational culture seems not favourable for sound education that St. Marcelin Champagnat envisaged. This shortcoming makes it necessary for applying Marist pedagogy in institutions of learning in Africa, especially in teacher education. Marist pedagogy is an educational approach tailored towards helping young people to develop how God would want them to develop. Many young people have lost sense of direction in life because they lack authentic models to follow. There are many factors such as the negative influence of the media, family dynamics, lack of role models, and negative peer influence that impact negatively on the educational system in Africa today, which can be corrected if Marist pedagogy is applied with passion.

Contemporary Factors Influencing the Education System in Africa

Education is no longer child-centred but salary-centred; many teachers do not teach because they love the learners but because of love of money (Osuji, 2015). Most schools do not care about the human development of school children but instead care for the income the school generates. Parents do not reap genuine fruits for their labour because many school proprietors are after scoring a hundred percent in standardized examinations organized by some examinations bodies such as the National Examinations Council (NECO), West African Examinations Council (WAEC),

or Kenya National Examinations Council (KNEC). This makes many learners to hold academic results that they neither merited nor can defend.

Schools are no longer places to teach morals, but commercial centres for economic benefit. Schools no longer prepare the youth for life; learners pass out from school without practical skills and good manners, creative thinking or the will for self-reliance, and even without language skills to communicate effectively. Most teachers do not offer helpful exemplary life models which children can identify with for healthy growth and development. Many children from broken homes do not meet attentive teachers that respond to their emotional needs. Such learners end up not developing human feelings towards their fellow human beings, consequently they fall prey to secret cults and other nefarious gangs that terrorise the society (Osuji, 2017). There are many instances of teachers abusing school children sexually, physically and emotionally. Most schools do not have proper infrastructure and necessary equipment required for sound teaching and learning. As a result, many learners come out from school more primitive than when they entered.

There are many mission schools springing up nowadays. Almost all the Catholic parishes, including Pentecostal churches, have school complexes, from nursery to senior secondary. The proprietors of these schools have a high and strong competitive spirit to make a name and attract more learners to their schools. They are forceful in teaching religion, aggressive in charging high fees, and tireless in striving to get good results by all means. In many cases the structures in most of the church schools are very imposing. But in the final analysis the motivation for establishing the schools has no moral or Christian standard. It appears that the spirit of rivalry possess most of the proprietors of the new schools. What value will children learn from such schools? Will it

be different from what we see today in politics? A bad tree cannot bear good fruits. If St Marcellin were in Africa today, he would have the strong desire to recruit dedicated young Christians to teach in schools (Osuji, 2015).

Commitment in Implementing Marist Pedagogy

Sustenance of Marist pedagogy demands commitment in its implementation. Marist pedagogy is an ideal approach to school management. Maintaining the ideal entails a lot of sacrifice and mortification on the part of the Brothers in particular, and their collaborators in general. The sacrifice and mortifications, on the part of the Brothers, are not farfetched because by their religious consecration, the Brothers are supposed to have crucified all the worldly pleasures and self-interests on the cross (Osuji, 2015).

Marist pedagogy is an educational approach developed in faith and love, handed to vowed men in religious life, as a sure way of giving children a quality and comprehensive education with the ultimate aim of helping them to serve humanity and go to heaven. The sustenance of Marist pedagogy today depends on the faith of the Brothers. Marist pedagogy entails carrying all stakeholders in Marist schools along in all issues of school administration. Effective application of Marist pedagogy today depends on the quality of the life of the Brothers. Marist pedagogy is more of an attitude than a technique.

To sustain Marist pedagogy today, Marist Brothers must be Religious Brothers. Africa as a continent is blessed with a lot of human and natural resources and therefore does not lack anything that interests the people of the modern world. The only thing that Africa lacks today is authentic Christian moral life. Living and teaching of authentic Christian morals has been the pride of Marist Brothers and Marist schools. As inheritors of a rich tradition that flows from St. Marcellin Champagnat in the field of education,

Marist Brothers have only Marist pedagogy to offer as a unique thing that will continue to differentiate them from the other educators. As educators, Marist Brothers have the ecclesiastical blessing of being dedicated to schools; hence the name: “Marist Brothers of the Schools” (Marist Brothers of the Schools, 2011, p. 17).



PART THREE
EDUCATION FOR SUSTAINABLE
DEVELOPMENT

**Classroom Interaction, Cultural Reasoning
and Scaffolding Activities, and
Sustainable Learning**

CHAPTER SEVENTEEN

CLASSROOM INTERACTION

Concept of Classroom Interaction

Individualised learning is the centre of transfer of knowledge, values, skills, and attitudes in the education sector today. In order to ensure sustainable learning in schools, the school environment needs to be conducive to teaching and learning. The classroom in a special way is the centre of learning in most schools. Facilities in the classroom, therefore, need to stimulate sustainable learning. In discussing classroom facilities, the role of interaction in the classroom between learners and their teachers cannot be downplayed.

In order for education to lead its informative, formative and transformative roles in the learner, learners need to be fully involved in classroom activities. They need to participate in the discourse of the discipline to think, speak, and be listened to as they participate in the discipline's particular mode of inquiry. This aids learners to develop competency and become critical thinkers in a classroom that provides opportunities for intensive, structured interaction among them. The interaction between the teacher and the learners is an essential part of teaching and learning process. This is because classroom interaction stimulates the learner's involvement in the classroom. It fuels the learner's motivation and helps him or her to see the relevance of the lesson.

Effective classroom interaction is the key to integral formation of the learner. It facilitates group work and enables the learner to develop his or her personality in a very positive way. It gives the

learner ample opportunity to respect and value the opinions of others. It also helps the learner to learn and understand how to work with others. By so doing, it helps to develop and improve the skills of team work; hence cohesiveness, which is the core to societal transformation.

Learners' Seating Position

The teacher's level of interaction with learners is based on classroom seating positions. The seating position influences interaction patterns in the classroom. That notwithstanding, the traditional classroom seating arrangement in columns is still employed in some schools. This makes learners to be reproductive learners; hence stifling sustainable learning. Kathleen, Bailey and Nunan (1996) noted that most verbal interaction between the teacher and learners took place with learners who sat in the front row and in the middle column of the classroom which offers a good eye contact opportunity with the teacher. Such learners get more from the lesson than those who do not interact with the teacher as much due to their seating position. However, Richards and Lockhart (2006) advises teachers not to pay attention to a small part of the classroom, or to stand too near to those in the middle as not to see those at the sides, but to make amends and be fairer by giving all learners an equal chance.

In most classrooms, teachers tend to nominate either high ability or extrovert learners to participate in lessons, hence, the same learners tend to participate most of the time. The teacher readily turns to another learner or answers the question him/herself if the low achiever is unable to answer instead of delving deeper. These learners are less likely to respond to whole class discussion or questioning, and are often disregarded when their response is incorrect. The teacher rarely nominates learners who are reserved. Yet, when high achievers are questioned, the teacher more read-

ily gives clues, probes for evidence or reasons, or encourages a more extensive response. These learners (achievers) receive positive response even when their responses are incorrect. During a classroom discussion, only learners who feel comfortable with the teacher will answer questions or participate in the discussion.

A classroom layout and seating positions of learners affect interactional dynamics in lessons. There is need for an action zone to be felt in the whole classroom. An action zone is identified as the place where most of the interaction in the classroom occurs; this could be in the front, middle, left or right. There should be two or more action zones in a classroom. Learners could also be moved around for all to benefit from the one action zone if there is no extra space. If less challenging questions are asked, the bright learners tend to switch off in class. So there should be effective questioning through proper questioning strategies.

Factors Influencing Learners' Participation in the Classroom

According to Stipek (2002), teachers have perceptions and categorise learners as 'good' according to their behaviour, or if they are high performers, and these are the ones who are often nominated. Teachers find learners who behave well and always aim at pleasing the teacher easier to teach. Such learners are respectful and participate actively in class by asking and answering questions. They will have low perceptions of other learners' competence and all these affect learning. A Teacher's behaviour towards learners is therefore affected by their beliefs about individual learners.

Factors that determine active participation from learners are: how friendly the teacher is to them, their proximity to the teacher (seating position), and how much the teacher interacts with them. It is worthy to note that a teacher's physical closeness to a learner facilitates interaction with learners. Learners who participate most actively sit in certain class positions as teachers tend to more often

nominate those who sit in the front row and middle seats in the classroom – the “T” – and ignore learners outside the “T” seating pattern.

Learners who sit at the back corners are rarely asked to answer questions. High performers go to the “T” and low performers, or those who do not want to participate, go to the corners where they believe they are not likely to be nominated. According to David (2010), teachers give less accurate and detailed feedback and guidance to learners they perceive as low achievers while they give learners perceived as high achievers more detailed and accurate feedback. The teacher mostly gives attention, and directs questions or feedback to learners who participate and are free to call for help. In most cases, it is the assertive high-achieving learners. Low achievers are asked fewer and easier questions than high achievers.

In many classrooms, generally, there is a traditional teacher/learner relationship. This makes some class members feel uneasy about participating fully in the type of tasks one finds in the communicative classroom, for example. Some learners want to come to the classroom and be receptive by taking notes. They neither like being asked to answer questions nor to contribute to discussions or presentations. Such learners tend to sit at the back of the classroom imagining that the teacher easily notices those who sit in front who are often asked questions. Teachers also tend to nominate the outgoing learners to respond to questions; hence the same learners tend to participate most of the time. There is need for the teacher to consider all the learners in the classroom for effective interaction and achievement of the lesson objectives.

Improving Classroom Interaction for Sustainability

The need to improve classroom interaction between teachers and learners in order to stimulate sustainable learning cannot be over-emphasized. Teachers should ensure that all learners get equal

opportunities to participate actively in the classroom irrespective of their seating arrangement. Teachers should also direct questions and positive feedback to all learners in the classroom.

The classroom layout might prove to be a key factor. Some teachers prefer a horseshoe layout for easy access of feedback, maintaining eye contact and monitoring lesson stages. Rows and columns are noted to be more suited for examinations, but are less appropriate for group work activities since rows or lines of tables stand in the way of communication and learners.

An awareness of class action zones helps teachers to position themselves and learners in the place(s) that gives everyone equal attention since teachers subconsciously involve certain learners in the lesson more than others. There is a correlation between the seating position and classroom contributions. Learners who do not sit in an action zone are likely to make fewer contributions and be questioned less by the teacher than those sitting in more advantageous positions. The teacher's level of interaction with learners is therefore based on learners' seating position.

Knowledge of action zones in the classroom will help teachers to pay attention to areas outside the action zone and create a more inclusive classroom atmosphere. The number of contributions from each learner is linked to the classroom seating arrangements. The teacher should give positive reinforcement to the responses given by learners and encourage all learners to be active. There must also be a fair distribution of questions and feedback directed to all learners despite their seating position so as to result in an all-inclusive or equal participation.

CHAPTER EIGHTEEN

MAXIMISING INPUT AND INVOLVEMENT**Teacher-Learner Interaction**

The maximisation of learners' participation in the classroom in order to enhance sustainable learning is of vital importance. There is need to always identify the methods that can best help maximise input and involvement of the learner in the classroom. The lecture method is often used especially with large classes thereby leading to 'passive'-learner roles. Some teachers view communicative approaches as noisy and time wasting because syllabus coverage is crucial to an examination-oriented syllabus.

Other reasons for this approach include classroom space limitation for executing interactive learning activities and learners not being used to interactive learning. However, there are instructors who employ learner-centred approaches. An Attempt to promote a learner-based, communication-driven approach is likely to encounter passive resistance due to their traditional learning context.

Maximising learner interest and involvement in the classroom can be achieved by applying various communicative activities. Teacher-learner interaction involves patterns like pair or group work activities. These provide a perfect opportunity for all learners to communicate. The teacher has to create an environment conducive to teaching and learning, establish rapport with learners, and elicit more plans for appropriate and interesting communicative activities, and exploit a variety of teaching resources. These actively involve learners in the learning experiences. This chapter focuses

on the teaching of English language. The justification for the use of English as an example is due to the fact that in most English speaking Africa, English language is a core subject in schools.

Interactive Communicative Methods in English Language Class

In order to increase speaking activities in the classroom, the interactive communicative method needs to be employed. This method is a communication-driven approach that employs learning activities, which promote learner-based communicative activities. One characteristic of communicative activities is to achieve the outcome that participants are required to interact by listening and speaking (Thornbury, 2005).

Interactive communicative methods are not widely used in some contexts, because the lecture method is often used especially with large classes. Williams (2011) observed that child-centred education is assumed to be the norm in state systems in rich countries, especially the English-speaking ones. He also noted that there is ample research to suggest that in much of sub-Saharan Africa, the teaching is largely teacher dominated.

It is pointed out that learners in a teacher-dominated classroom do not understand the teacher or textbooks; there is no attention to the presentation or checking of meaning in reading classes. Rote-repetition of written text without comprehension is a ‘reading-like’ activity, but not reading in the sense of cognitive engagement with the text. Similarly, copying from the chalkboard without comprehension is ‘writing-like’, but not ‘true’ writing.

In learning English as a foreign language, for example, two key factors are important: the suitability of the teaching methods employed, and the learners’ mind-sets. On teaching methods, largely employing the grammar-translation method, which is a very traditional approach, has a number of drawbacks. The uniform application of traditional approaches means an emphasis on rules,

translation, repetitive oral or pronunciation drills, vocabulary accumulation and memorisation. The consequences are dull and boring lessons, less attention to language function and meaning, few opportunities for learners to productively use the language, and a bias to the more academic learners or those who are more inclined towards a 'rules-based' learning style.

There will also be too great an emphasis on reading and writing skills to the detriment of the acquisition of aural and verbal fluency. This is also quite a common occurrence at secondary or high school level where written coursework and examinations dominate the curriculum and determine progress and advancement. Teachers, too, are much influenced and affected by this but, again, the very best and committed educators find ways of balancing effective language learning and assessment requirements.

Through this method, new language is presented and practised unimaginatively, largely through the textbook and through monotonous and mechanical audio-lingual drills. The approach and interaction in the classroom is almost totally teacher-directed, with the learners being passive recipients of knowledge about the language. The teachers' attitudes and overall approach stifles any opportunities for interaction and fluency that the course and its material might offer. Teachers operate very rigidly and formally in the classroom – the arrangement of desks, all activity being teacher-directed, a prescribed and strict form of behaviour for learners, and close adherence to the textbook with a very overt focus on tests and examinations. More traditional methods – grammar-translation, the audio-lingual approach and behavioural methods– see mistakes and errors as an obstacle to learning and something which has to be addressed immediately and very directly, and 'eradicated'.

Based on this method that makes learners passive in the classroom, there is need to identify a varied range of specific techniques

and strategies that can be used to maximize learner input. Teachers thus need to experiment with different participatory and creative ways of teaching. Through these activities learners will peer teach and hopefully be motivated to use the language. It is vital to note that three key considerations influence the successful implementation of increasing learners' contributions through a more communicative approach. The first of these is an acknowledgement of learner styles. The Visual, Auditory, and Kinaesthetic Learning Styles (VAK) model distinguishes three types of learners. Firstly, there are visual learners who use mind-maps, colour, and draw diagrams and sketches. Secondly, are the audio learners who read aloud, record to their iPod, discuss revision, and put their notes to a tune. Finally, there are physical learners who move around the room and mentally revise while jogging or swimming.

Skills for Participatory English Lessons

There are several skills that a teacher could employ to conduct participatory lessons that can make learners to be successfully communicative. Learning should be active with most activities involving discussions. Teachers and learners should interact by teachers giving responsibility to learners through a variety of interaction patterns such as small or large group teaching, tutorials, seminars, discussions and presentations. Groups in the class can be made to carry out specific tasks that are different from other groups. Individual, pair and group work activities should be varied.

According to Nunan (1998), language programmes should have twin goals which are: language content goals, and learning process goals. Seligson (2008) opined that through group work, learners energise each other and weak learners are taken care of during the shuffling as they learn from different groups or pairs. He said that teachers could involve learners by asking them to suggest, react, predict, compare, discuss or do demonstrations.

On maximising learners' opportunities to speak in the classroom, there is need to use small groups, large groups and pair work. The participatory activities create conditions that foster learning opportunities for the majority of the class. It also makes the teacher to talk less in the class; hence, giving much attention to learner-centred learning.

Another aspect of active learning also involves movement and displays of work produced. This is achieved through use of kinaesthetic-'linked' activities that involve getting learners out of their seats. They can do this to exchange groups or partners, present findings in front of the class, or to post or stick findings or work on designated areas on the walls. Learners can also move to write on flip charts or the chalkboard. The teacher can give input where needed to encourage creativity and participation. Learners discover much through fun and bonding which involves a lot of movement and activities.

In reading, learner involvement is maximized through prediction activities. Learners can predict content from the title, skim the text for general meaning and read the text again carefully, or scanning to find the information they need. To further develop learners' reading skills, other activities that can be carried out include learners predicting, then reading the text to confirm their predictions through answering written questions or discussing comprehension questions with their partners or groups or the whole class.

To encourage communication, learners can be encouraged to compare their answers and discuss how they found them with the other learners in the classroom. This interaction makes reading interactive and communicative. The reading and discussion integrates the reading and speaking skills. There is a lot of emphasis in integration of language and literature, as well as integration of the four language skills of writing, listening, speaking and reading, within lessons.

It is important to give learners greater control over learning materials and more choices of topics. This gets them involved in decision making or reflecting on their own learning process. In debate, for example, learners participate more on topics that are related to their life experiences.

Learners should be encouraged to discuss or brainstorm in groups and be given constant short breaks of discussion which takes away tension. Individual and group needs should be balanced to further make learners exchange partners when doing pair work to check their understanding. This allows all to see and hear what each individual has in mind, or has understood, and to decide what to do next.

Depending on what appeals to their learners, there are therefore different learning styles that teachers could apply to involve the learners. Teachers could also make greater use of pictures, games, laminated cards with information, the chalk- or whiteboard, discussions, speaking or listening activities, reading aloud, drama, and involving learners in movement to curtail too much teacher talk time through a lecture approach. These would maximize learners' opportunities to speak in class, but for activities to be appropriate, teachers should ensure that they give clear explanations and repeat instructions if need be.

Use of technology can also involve learners. It captivates learners' attention and breaks the monotony from lecture method. Sometimes learners do not participate because they are bored, but here they retain more of what they visualize. Some institutions have initiated the use of technology like PowerPoint, use of videos/DVDs, Moodle and e-learning, among others, to get rid of the lecture method. This makes learning interesting, authentic, active and interactive. Through e-learning, one is able to post course outlines, materials, assignments, and have a forum for discussion which links use of technology with communicative approaches.

Creativity in Teaching of English to Speakers of other Languages (TESOL)

Planning for appropriate and interesting communicative activities that will hold the learner's attention throughout the lesson is a skill one needs to master. Greater use of YouTube and interactive white boards (IWBs) should be encouraged as a form of engagement to increase the focus on to activities where learners are required to further express their own opinions, and share these with colleagues. Learners should be made to understand the advantages or benefits of 'non-traditional' classroom activities when doing advanced language study. It is important to note that teachers will use techniques or strategies that work for them as individuals and their situations because choice might be influenced by the context in which they are teaching as there could be, for example, limitations of space. These reflect the importance of creativity of the teacher in lesson preparation.

A teacher should facilitate experiences that help learners practise and master knowledge and skills. Teachers should therefore exploit a variety of teaching resources that actively involve learners in the experiences as they play the facilitator role. Fortunately, times and methods have changed. By contrast, TESOL and modern language teachers now strive to use approaches that are more communicative, lay emphasis on participation and interaction, and attempt to meet the needs and expectations of the learners.

It is generally recognised that effective language teachers use a collage of different approaches and techniques. These range from the more traditional audio-lingual methods to introduce the language forms and vocabulary, through integrated skills work and use of different media, to more communicative and functional interactive techniques. Teachers need to be very flexible in the methods and approaches they use so as to maximise learner interest and involvement or engagement, learning experiences and positive outcomes.

As a teacher, focus first on the teaching of meaning and, thereafter, explain or outline the form of the new or target language. Learning a language by learning the rules is rarely going to be successful. Learners need to have adequate opportunities to use the new language in meaningful ways. They do not need lots of grammar and any more rules than they need. If learners get enough general exposure to language, they will work out some rules for themselves. It is sometimes useful for a teacher to give learners simple rules because occasionally these can guide them.

However, the rules of grammar and the form of the new language should not be the starting point. Overall, teachers should try to adopt an approach that has a clear focus on meaning within a clear context, and which also attempts to balance the learning styles of the learners. Language teachers need to strongly focus on meaning at all levels. In other words, teachers need to make sure that a new element of language is well taught within a clear context so that the use of that language item is very clear. If we are teaching conditional sentences such as *if* + Present Simple + Future, for example, we must make it clear to the learners how we use this combination (to talk about things that will happen or are likely to happen) because just teaching the form will not help them to know when to use this combination.

Provide opportunities for learners to interact and speak the language. This is one of the main challenges that good language teachers have and many teachers encourage this behaviour through class discussions and pair work. This is a practice where a meaningful task is set and the learners are asked to work in pairs, then everyone can work or speak or listen, and the task can go on for five minutes or more while the teacher moves around unobtrusively listening to what is being said.

The activities could involve using pictures, blank filling, dialogue practice, role-plays, quiz competitions, simple situational dramas,

as well as situations using a telephone. Everyone gets talking time and this is a far better use of time than, say, questioning learners individually. Learner-learner communication is a very important element in TESOL classrooms and facilitates both learner practice and monitoring by the teacher. However, working in pairs or small groups does not of course mean that the lessons will be perfect. No doubt some learners will use their first language or do an activity in a casual way, so time might be wasted. The teacher needs to ensure that the tasks are carefully chosen and are appropriate, and then move around the classroom to check on the learners' progress.

Facilitate the learners' language skills practice. The ideal lesson is one that involves some listening, some speaking, some reading and some writing, integrated with some specifics of the language (vocabulary or grammar or intonation, etc.). Integrating all the elements helps learners to learn because they learn in different ways, and seeing the new language in different contexts helps to reinforce learning. Where the teacher can successfully integrate the four language skills, the learners will be able to practise the new language in a range of different ways. If the learners get the opportunity to listen and speak, and later to read and write the new language, they are more likely to remember it. Language skills go hand in hand and these skills should be practised together so that one skill helps to reinforce the other skills.

Present new language imaginatively and in an authentic or natural context by bringing in real materials (newspaper adverts, short pieces from newspapers/magazines, pictures, photos, adverts for houses, adverts from personal columns, etc.) to supplement the textbook. The teacher needs to link the language to real life even with elementary pupils. Similarly, depending upon the resources available to the teacher and learners, the learners should have the opportunity to listen to stories, to the radio, watch TV programmes or videos, and to work with new communication tools – the In-

ternet, SMS texting, blogs, etc. This will ensure that they become familiar with natural language rather than just exercises where they do rather meaningless repetition.

Qualities of an Efficient and Effective Teacher of English Language

The difference between positive and negative learning experiences is very often down to the teacher and his or her personal and professional qualities. Teachers need to be very enthusiastic about the target language and culture and aim to transfer this excitement to their learners. The truly best teachers strive to be inspirational. Teachers should aim to be motivational and employ very many different techniques to develop learner interest and engagement. They should effectively facilitate learners' learning.

Above all, teachers should be very supportive to their learners. Support is vital because learning a new language is difficult. Learners are understandably quite nervous about doing worse than their fellow learners and if the teacher appears not to support all learners, then the classes can become unbearable. Constructive support is what is needed and good teachers will provide this for all of their learners, whatever their ability level, and whatever signs of progress they demonstrate. This is one of a teacher's most important skills. Building confidence is essential in language learning, and so too is humour and laughter in the classroom.

Concerning the learners, teachers often forget why learners are learning the target language. Teachers of English need to be conscious of the language environment in which the learners are living, their age, the reasons why the learners are learning English (their needs) as well as (as far as possible) their learning style. A learner might be learning English for various reasons such as general social reasons, to keep a middle-aged brain alert, for career purposes, because a partner has got a new job in an English-

speaking country and she or he has to accompany the partner, simply because it is on the school syllabus, or to pass examinations. Motivation in the latter context – secondary or high school – can be particularly challenging.

The English language is one of the many subjects that have to be studied in order that the learner can progress academically. Equally, where it is an elective subject, learners will often adopt a more *laissez-faire* approach, and motivation and engagement may decline. The frequency of times that the teacher meets the learners will also affect the teaching approach. Whatever the situation, the teacher has to try to maintain the learners' motivation with interesting activities, encouragement and praise, songs, games, rhymes, poems, funny stories, lots of learner interaction and so on. The lessons need to be interesting and, as far as possible, enjoyable. Genuine tasks based on learners' own needs and interests will encourage understanding and retention. It is only through using a communicative approach and varying interaction patterns that a classroom environment can be created where learners have the opportunity to carry out genuine tasks.

CHAPTER NINETEEN

CULTURAL REASONING AND CLASSROOM SCAFFOLDING ACTIVITIES

Concept of Cultural Reasoning and Scaffolding Activities

Scaffolds are common in building engineering. Scaffolds are those pieces of wood or iron that the builder makes that enable him or her to reach the point where he or she puts the bricks or blocks, plaster, or paint. They are support to the builder and enable him or her to do neat and efficient work. Scaffolding is a metaphor for an approach to teaching which refers to the way temporary support is provided by one person to another for purposes of learning. Scaffolding describes interactions between an expert to a novice, a teacher to a learner, or a knowledgeable peer to a less knowledgeable peer. There is no exact definition of scaffolding, or consensus. The education sector is also carried along with regard to scaffolding.

Quality education is the key to productivity in the education sector of any nation. Cultural reasoning and scaffolding techniques enhance quality in teaching and learning. However, when the support learners need to facilitate learning is lacking, the chances of achieving the desired outcomes become minimal. Therefore, collaborative and constructive learning is always enhanced through cultural reasoning and scaffolding activities.

Cultural reasoning emphasises the interdependence of social and individual processes in the construction of knowledge (John-Steiner & Mahn, 1996). Here, the learner is helped to grasp a con-

cept based on his or her environment. The techniques of cultural reasoning and scaffolding provide a rational and clear approach to organising the course material. Cultural reasoning and scaffolding techniques provide learners with a tool for better understanding and transfer of knowledge (Cox, 2016). Cultural reasoning and scaffolding techniques, according to Per and Osborne (2016), have three main implications to teaching and learning at school. They command a new perspective on the place and role of reasoning in the school curriculum. They also suggest that teaching materials can be developed from authentic cultural examples. Lastly, they demand a change of classroom pedagogies towards interactive and dialogical teaching. Therefore, to enable schools realign their teaching and learning strategies in order to meet the demands of the 21st century, there is need for cultural reasoning and scaffolding activities.

Learning is a social process and the origination of human intelligence in society or culture. As Vygotsky (1978) expressed in his sociocultural theory that:

Every function in the child's cultural development appears twice: first, on the social level, and later on the individual level; first between people (inter-psychological) and then inside the child (intra-psychological). This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher functions originate as actual relationships between individuals. (p. 57)

The main idea in Vygotsky's sociocultural theory is the need for active involvement of learners in the teaching and learning process. It is all about developing skills among learners by offering them activities and projects in their relevant disciplines and contexts (Hussain, 2012). This enhances knowledge construction and transfer in the learners.

Cultural Reasoning and Scaffolding Activities in Teacher Education

Teacher education programmes need to produce professional teachers. The attributes of professionalism of teachers include teaching and learning issues and pedagogy that meet the demands of the 21st century. These are skills and attitudes dedicated to promoting the learning of learners and attitudes towards ethical formation of the learners. Teachers occupy a central and vital position in any educational system. Their commitment and attitudes have been of paramount interest to educational authorities and many researchers.

The quality of an educational system cannot outperform the quality of its teachers. Therefore, teacher motivation plays an important role in the promotion of teaching and learning excellence. Despite teacher motivation being fundamental to teaching and learning, professional development programmes should be learner centred, knowledge centred, assessment centred and community centred to optimize teacher learning. This is because the 21st century teacher must be able to continuously learn and teach others how to learn. As Ngara (1995) expressed, the quality of learning experience that an institution provides depends on the quality of the teacher, the quality of teaching and the appropriateness of the content. Therefore, effective learning experience is enhanced when the “teacher is adequately qualified to guide the learner and employs the most effective methods of teaching basing his or her teaching on the most appropriate content in terms of both relevance and quantity” (Ngara, 2005, p. 45).

Scaffolding Activities in Teaching and Learning

Teaching effectively is not an easy task. Teachers are mandated by their respective curricula to achieve certain outcomes, but how those outcomes are achieved is up to the teachers. It is difficult

for teachers to organise the subject matter in a comprehensible way which would allow the learners to understand and work with it. The technique of scaffolding provides a rational and clear approach to organising the course material.

Scaffolding is the teaching technique that involves providing learners with the supports needed to complete a task or facilitate their learning of new concepts. Some learners need more scaffolding than others, but those who do not need the supports do not need to use them. As the learners develop and their abilities in a particular area improve, the supports related to that area can be gradually removed. Tasks and activities can be broken down into achievable chunks for the learners so they are able to gain confidence in their abilities without feeling too much stress or anxiety. The authors of this book did an empirical study on cultural reasoning and scaffolding activities using English language and geography. This is why they based some examples of these activities using English language and geography.

In an English language class for example, some of the scaffolding activities that enhance teaching and learning include:

- **Demonstration:** Showing and telling, i.e. show the learners the outcome or product before they do it. For instance, show them a model of a writing exercise they are meant to do.
- **Building on prior knowledge of the learners:** You can ask the learners to share their experiences and ideas about the content to be taught.
- **Use of structured group discussions** to allow the learners to talk. You can also involve learners in impromptu speeches, debates, and role play.
- **Pre-teaching, e.g. of vocabulary:** You can do this by introducing words in context of what the learners already know or have interest in. You can use analogies, metaphors, photos, just to mention a few.

- Use of visual aids, e.g. pictures, charts and tables.
- Asking questions for feedback and review: Give learners time to discuss with their fellow classmates.

In a geography class, some of the scaffolding techniques that can promote transfer of knowledge, skills, values and attitudes to the learners include:

- Engagement of learners in discussion groups: The teacher should give varied examples, from both local and internationally contexts, to suit the topic to enhance further understanding.
- Introducing learners to some topics and assessing their understanding of the same through the questions and answers method before explaining the concept to them.
- Ensuring that an assignment that is related to the topic is given to the learners.
- Giving the learners the opportunity to share their own experiences and ideas about a concept. This enables the learners to internalize the concept.
- Ensuring that new vocabularies related to the topic are well explained so that the learners are not left wondering about the terminologies used in class.
- Use of audio-visual aids, e.g. maps, realia, charts, globe or projectors.
- Use of field trips and action research.

Relevance of Cultural Reasoning and Scaffolding Activities in English and Geography Classes in Colleges of Teacher Education

There has been an outcry for the need of constructive teaching and learning in colleges of teacher education, which will help learners to transfer knowledge from their field to other fields. This

is due to the fact that observation has shown that some learners of the English language and geography encounter difficulty in remembering what they learnt in the previous semesters, not to mention applying it in other fields of study. The cause of this is arguably the lack or poor usage of cultural reasoning and scaffolding techniques in teaching and learning. Suleh (2014) in her study on maximising output in the English language, for instance, found that the interactive communicative methods which are learner-centred are not widely used in some contexts; instead the lecture method is often used. As a result, for learners who are not used to communicative approaches, their levels of spoken interaction are accordingly low.

This calls for the need of varied teaching techniques that could help learners learn certain concepts easily, and have the ability to transfer what they have learnt in other fields of study. This is because some researchers have established that if teachers systematically guide the learning of their learners using various teaching methods, it enhances the learners' cognition level and enables them to transfer learning easily (Alibali, 2006; Verenikina, 2008; Chang, Wang & Chao, 2009; Janneke, Monique, Frans & Jos, 2015; Cox, 2016). Therefore, collaborative and constructive learning is only enhanced through cultural reasoning and scaffolding activities.

Commitment in teaching to yield effective and efficient results is not an easy task. This is due to the fact that teachers are mandated by their professionalism to achieve certain outcomes. It is difficult for teachers to organize subject matter in a comprehensive way which would allow the learners to be able to understand and work with it. In specifically looking at the role of scaffolding in nurturing learning, a participant in Verenikina's (2008) study established that scaffolding gives the learner a more active role in their learning as opposed to teacher-directed learning. This is because as another participant expressed, here, the teacher provides support to the

learner in order to help him or her to achieve success in a particular task. Varieties of scaffolds such as advance organizers, cue cards, concept and mind maps, examples, explanations, handouts, hints, prompts, questions cards, question stems, stories and visual scaffolds help learners to progress through a task and accommodate their different levels of knowledge (Alibali, 2006).

The lecture method of teaching leading to reproductive learning and banking education (Ngara, 1995) is a global problem that needs to be addressed. This is due to the fact that it has led to poor performance of learners in many aspects. Omoro (2014), for example, determined methods used in teaching geography in Rongo, Migori County, Kenya. The study found that the facilitation approach in teaching which specifically deals with scaffolding was missing. As a result, learners perform poorly in geography.

Cultural reasoning and scaffolding techniques enhance learning of English and geography. They transform pedagogy into more use of communicative teaching and learner-centred approach, which comprises collaborative and constructive learning. This is because they promote productive learning and problem-posing education that encourage learners to discover solutions for themselves (Radford, Bosanquet, Webster & Blatchford, 2015). Hence, the communicative interaction patterns that can help learners include: small group work, whole class activities, use of pictures, photographs, paintings, maps, charts, globe, realia, games, laminated cards with information, the chalk- or whiteboard, discussions, reading aloud, drama, use of technology, and speaking or listening or writing.

CHAPTER TWENTY

SUSTAINABLE LEARNING

Concept of Sustainable Learning

Education has always been a vital tool to human growth and development and anyone who acquires holistic education embraces life that is worthwhile. The centre of sustainable education is the learner (Alelaimat & Taha, 2014), and the teacher is the vehicle and tool that propels this sustainable learning in the learner. If his or her active role in promoting this delicate and honourable duty is missing in the life of the learner, then the sustainability of the learner's learning goes to oblivion. Education needs to be: i) informative – giving the learner all the information he or she needs regarding the society in which he or she lives; ii) formative – forming the heart and conscience of the learner in order to enable him or her acquire the desired skills, values and attitudes for the good of the society; iii) transformative – enabling the learner to work towards the development of the society for the good of the present and future generations.

However, many a time, the teacher who is supposed to be at the centre in helping the learners acquire sustainable knowledge, skills, values and attitudes for the transformation of the society is 'missing in action.' His or her availability and services in the learner in the areas of enhancing quality of life, sustainable change, citizenship and stewardship, interdependency, and needs and rights of the future generation is questionable.

We are in the era of sustainability and a lot of literature stress on learning for sustainability, thinking critically about sustainable

development, sustainable living and learning, and education for sustainable development among others. That notwithstanding, the role of the teacher in promoting sustainable learning in the learner is of paramount importance.

Generally, learning can be divided into two broad categories namely constructive and reproductive learning (Jones, 2012). Sustainable learning is connected to constructive learning and reproductive learning is viewed as outdated and unsustainable because it is against the professional growth of the learner. The aim of each and every teacher is therefore to promote sustainable learning in institutions of learning.

There is a Chinese proverb that says: ‘If you give a man a fish, he will eat it in one day, but if you teach him how to fish, he will eat fish the rest of his life.’ This dictum is a pure reflection of sustainable learning which will enable learners to be competitive in the society. In Africa today, some graduate learners are unemployed but cannot start self-employment businesses despite studying entrepreneurship courses. This is a reflection of reproductive learning given to learners in many institutions of learning.

Freire (1972) suggested problem-posing education which he said is constructive and sustainable compared to the banking concept. The banking concept of education is a situation of learning where learners are on the receiving end. The empirical and humanist psychologist, John Locke, termed this situation as *tabula rasa*, where the learner has no knowledge of anything inherent in his or her mind. It is quite a pity that many institutions of learning are still blamed for producing half-baked learners because they prefer the banking concept rather than sustainable learning.

Teacher Effectiveness in Teacher Education in Higher Institutions

A renewed mandate to enhance teaching and learning appears predominantly in the strategic plans of many institutions of higher learning (Delaney, Johnson, Johnson & Tresian, 2010). In fact, students' assessment or evaluation on effectiveness in teaching is not a new phenomenon in the world of education. For many decades, the outcomes of students' evaluation of teaching effectiveness is seen as an important tool to measure the effectiveness of teaching quality. It has been used to reflect on qualities associated with good teaching such as lecturer's knowledge, clarity, classroom management, and course organisation.

Much research has been conducted to determine students' perceptions of effective teaching, create instruments to measure these perceptions, and to establish criteria by which to judge an instructors' effectiveness. Encouragement to isolate and quantify characteristics of effective teaching in higher education has come from a number of sources and driven much research. According to Axelrod (as cited in Delaney et al., 2010), students' perceptions of what constitutes effective instruction transcend time and mode of delivery. He noted that the characteristics of effective teaching identified by contemporary students are consistent with evidence gathered from the study of historical memoirs and biographies. He isolates seven qualities that are common elements of good teaching which transcend time, place, discipline and instructional type. These qualities are: accessibility and approachability, fairness, open-mindedness, mastery and delivery, enthusiasm, humour, knowledge and inspiration imparted.

Clark (1995), in looking into the effectiveness of lecturers in the classroom identified cognitive and affective goals of effective teaching at the university level. In Cognitive goals, he stressed:

- *Knowledge* – One of the goals of university teaching is to change students' factual knowledge and competence in the course material, strengthen various cognitive capacities, e.g. writing and reasoning skills, and to foster an intellectual appreciation of the subject matter.
- *Organisation of Instruction* – This quality reflects the extent to which individual lectures and discussions are carefully organized and planned in a coherent manner. Well organized instructors also demonstrate how ideas in specific lessons fit into the whole course and relate to other components of the course, such as labs and readings.
- *Clarity of Expression* – A third aspect of effective teaching involves techniques that are used to explain concepts and principles. Clear expressions are important for university teaching and to help learners connect new and challenging materials to concepts, examples and language that they already know.
- *Quality of Presentation* – This involves voice and other aspects of presentation by a teacher, including articulation, attention and enthusiasm.

In affective goals, he also stressed the following:

- *Stimulating Learners' Interest*: Stimulation of interest is important as it increases learners' attention to lectures and class discussion.
- *Learners Participation and Openness to Ideas*: Effective lecturers try to foster active participation and interaction of learners in classes and to communicate their openness and respect for alternative and challenging points of view.
- *Interpersonal Relations*: Promoting agreeable and interpersonal relation between instructors and learners to convey concern and respect for individuals. The purpose of good rapport is to create a congenial atmosphere in which learners having diffi-

culties will seek help from the instructor and in which learners feel welcome to offer alternative explanations in class and to get feedback on their ideas.

- *Communication and Fairness*: Open and effective communication about evaluations and other aspects of the course contribute to learners' learning and performance by avoiding unnecessary uncertainty associated with vague assignments, and by providing learners with constructive feedback about their performance so they can learn from their mistakes.

Ralph (as cited in Delaney et al., 2010), also in critically looking at the effectiveness of the lecturer in the classroom, identified five attributes of effective instructors as thus: commitment to learners, knowledge of materials, organisation and management of the environment, desire to improve, and collaboration with others. Other studies that looked at the effectiveness of the lecturer in the classroom include Marmah (2014) who studied learners' perception of the lecture method in the College of Technology Education, Kumasi, and revealed that theories and practical steps are necessary for delivering effective lectures.

Attitude of Learners towards their Lecturers and Educational Resources

Globally, many studies have been done on the attitude of learners towards their lecturers and learning resources. Some of the classical ones include Betty (1976) who studied the attitude of learners towards teachers as a function of learner academic self-concept. In the study, she established that learners judged teachers on the dimensions of learner-teacher rapport, communicative style, instructional style and stimulation. To her, for a learner to positively perceive their teachers, the teachers had to demonstrate these characteristics.

Furthermore, Channa, Yossiri and Varavejbhisi (2012) studied learners' attitudes towards teachers using activities in English as a Foreign Language (EFL) class. The study revealed that the use of activities was an unavoidable phenomenon in the teaching of English as a foreign language and the learners had a positive attitude on the teachers using different techniques for classroom activities. Yousef and Balaramulu (2013) looked at learners' attitude towards teachers' behaviour in Hyderabad University. They found that those teachers learners felt were effective in delivering their course content used different motivational and teaching techniques, they guided their learners, and used reference books as well as notes, hence making the classroom environment conducive to learning. We can thus deduce that those lecturers perceived as effective contribute towards sustainable learning.

Other studies have focused on the use of resources in enhancing learning and teaching. Of particular focus in the 21st century is the use of Information and Communications Technologies (ICTs) in improving the learning process. Saunders and Pincas (2004) looked at learners' attitude towards ICT in teaching and learning in the UK. In their study, they found that the learners' current use of emails and the Internet to support their studies is clearly high. The learners surveyed firmly believe that ICT has a significant role to play in supporting and enhancing their university learning experience.

Similarly, Hong, Ridzuan and Kuek (2003) looked at learners' attitudes towards the use of the Internet for learning at a university in Malaysia. The study found out that generally, learners at this university had positive attitudes towards using the Internet. This perception was not race or gender specific, neither was it related to learners' scholastic ability. Clearly, for learners to benefit in sustainable learning in institutions of learning, they must have a positive attitude towards their lecturers as well as the learning resources

available for their use. The lecturers must also be effective in their delivery of their subject matter.

Relevance of Lecturers' Teaching Methodologies to Sustainable Learning in Teacher Education Higher Institutions

Institutions of higher learning aim at providing quality education. The main implementers of learning process are lecturers. Lecturers in tertiary institutions play a major role in the learning of students. The relevance of the lecturers' teaching methodology to sustaining learning in tertiary institution cannot be over-emphasized. Sustainable learning is a process which allows for the educators to evaluate and re-evaluate their teaching methodologies while not ignoring the role of the learner. The learner being the main beneficiary should play a major participatory role particularly in feedback and evaluation of the course content, methods of delivery, as well as the assessment procedures.

Teaching methodologies adopted by most lecturers vary from lectures, seminar presentations, research, to use of Information and Communications Technologies (ICTs). The applicability of the teaching methodologies is what varies from one university to another, and respectively, from one lecturer to another. Thomas (2004) argues that despite the apparent widespread support for the concept of learner education in sustainability, there is little implementation. Most universities are faced with financial crises and are not in a position to provide the necessary resources that match with provision of sustainable learning for sustainable education, but narrow down to the basic lecture methods.

The teaching methodologies adopted by lecturers should focus to sustainable learning through commitment and interrelations by various groups in creating an environment conducive to learning for sustainability. Knapper (2006) contend that teachers and educa-

tors can provide sustainable learning by upholding the following: base learning on meaningful tasks, not memorisation of facts, provide for learner-teacher interaction, encourage team learning and learner interaction, use authentic assessment, constructive feedback and peer, self-evaluation, make learning processes explicit and encourage reflection, stress integration of ideas from different fields, recognize individual differences between learners, teachers to serve as role models, guides, motivators of learning and set tasks that are challenging but achievable, among many others.

Teaching methodologies in tertiary institutions should reflect current trends of global education. Constant research and innovation should be applied by those universities that need to produce qualified and skilled personnel for current market needs. The theme of sustainable learning is a core value in higher education. Every institution struggling to achieve these goals should be seen as commitment to the process. Similarly, Graham, Berman and Bellert (2015) advice lecturers to enhance sustainable learning through practical exercises. Typical examples are the use of case studies and vignettes, tables, figures and diagrams to help readers visualize core ideas, theories and themes. These can help learners internalise the content and apply it to real world situations. Bourke and Simpson (2009) reiterate that the organizations have a responsibility to promote the sustainable use of natural resources through teaching and learning, research, knowledge transfer and innovation.

All methods that are adopted by lecturers need adequate resources such as teaching materials in form of textbooks, journals and computers. Institutions of learning need to take advantage of new computer technologies and use them effectively, develop an overall framework and strategy for their application, and to have an organizational structure in place to manage the development of strategies and oversee their implementation. This is because

ICT services provide one of the best teaching methodologies. E-learning platforms, for example, is an impetus to effective teaching and learning.

EPILOGUE

The curriculum elements: objectives, contents, learning experiences and evaluation are key in any school enterprise. The needs and aspirations of the learner and the society are always a priority in any curriculum endeavour. Therefore, the need for sustainability – sensitivity to the present and future generations with regard to societal transformation – is vital to humanity.

In order to achieve sustainable learning, there is need to review existing curricula in terms of objectives, contents, learning experiences, and assessment strategies. The teacher's preparation of the lesson, methodologies and educational resources employed in the implementation of any curriculum are also of paramount importance to sustainable learning. The governments also as the key players in the education sector need to provide resources and funding to facilitate the fundamental shift in education and embed sustainability in the curriculum, research, and operations in the institutions of learning.

The development of tools, resources and appropriate professional development for teachers are required for this fundamental shift due to their role in the collective approach for successful sustainable development. This will help transform social learning in order to cultivate a learning environment that enhances problem solving and learning for the future.

Teachers specifically need to:

- a) Be role models to the learners.
- b) Help learners to love God and humanity.
- c) Be available to the learners.

- d) Prepare their lessons ahead of time.
- e) Be well knowledgeable in the subject matter.
- f) Teach in a logical and well-organised manner.
- g) Use appropriate and diverse teaching aids and methodologies.
- h) Create an environment conducive to teaching and learning, and make the class interactive enough.
- i) Provide an opportunity for questions, opinions and comments from the learners.
- j) Respond satisfactorily to questions and problems presented by the learners.
- k) Educate the learners for character formation, self-reliance and the transformation of the society.
- l) Give adequate directions for learners' personal studies.
- m) Make the subject matter intellectually stimulating and affectively challenging.
- n) Treat learners justly and equally.
- o) Present the objectives of the lesson in a clear and comprehensive manner.

Learners on their part need to:

- a) Cooperate in class with their teachers.
- b) Be punctual for each class.
- c) Participate actively in class discussions.
- d) Work hard by doing research on a subject matter before each lesson.
- e) Live out the values of education in the society.

REFERENCES

- Adams, R. S. & Cheri, D. (1981). *The process of educational innovation*. Paris: UNESCO
- Adetayo, J. O. (2014). Assessing the affective behaviours in learners. *Journal of Education and Practice*, 5 (16), 8-15.
- Akinpelu, J. (1981). *An introduction to philosophy of education*. London: Macmillan.
- Alelaimat, A.R., & Taha, K., (2014). Sustainable development and values education in the Jordanian social studies curriculum. *Education*, 134 (2), 135-153.
- Alibali, M. (2006). *Does visual scaffolding facilitate students' mathematics learning? Evidence from early algebra*. Retrieved from <http://ies.ed.gov/funding/grantsearch/details.asp?ID=54>
- Andong'o, E. & Mugo, J. (2011). Early childhood music education in Kenya between broad national policies and local realities. *Arts Education Review Policy Review*, 109 (2), 43-52.
- Anukam, I. L & Anukam, H. O. (2006). *The hidden curriculum & school administration*. Owerri: SkillMark Media Ltd.
- Azuka, B. F. (2014). Assessment in primary school mathematics classrooms in Nigeria. *Journal of Education and Practice*, 5 (30), 40-45.
- Bagchi, K. & Udo, J. (2010). An empirical assessment of ICT diffusion in Africa and OECD. *International Journal of Information Technology and Management* 9, (2), 162-184.
- Bath, M., Godemann, J., Rieckmann, M., & Stoltenberg, U. (2007). Developing competencies for sustainable development in higher education. *International Journal of Sustainability in Higher Education*, 8 (4), 416-430.
- Betty, J. H. (1976). Attitudes towards teachers as a function of student academic self-concept. *Research in Higher Education* 4(1), 41 – 58.
- Bloom, B. S. (1956). *Taxonomy of educational objectives*. New York: David McKay Co. Inc.

- Bobbit, F. (1918). *The curriculum*. Boston: Houghton Mifflin Company.
- Boston, C. (2002). The concept of formative assessment. *Practical Assessment, Research, & Evaluation*, 8 (9). Retrieved from <http://PAREonline.net/getvn.asp?v=8&n=9>.
- Bourke, J. & Simpson, O. (2009). *Sustainability in education: Is distance learning an answer?* Retrieved from http://www.openpolytechnic.ac.nz/static/pdf/research/open_polytechnic_working_papers_order_form.pdf
- Channa, M. A., Yossiri, Y. & Varavejbhisi, Y. (2012). Students' attitude towards teachers using activities in EFL class. *International Journal of Academic research in business and social science* 2 (5), 10-22.
- Chang, J. Y. T., Wang, E. T. G. & Chao, R. M. (2009). Using constructivism and scaffolding theories to explore learning style and effects in blog system environment. *MIS Review*, 15 (1), 29-61.
- Clarks, J. (1995). *Suggestions for effective university teaching*. Retrieved from <http://10.uwinnipeg.ca/clark/acad/teach/effteach.html>.
- Cox, J. (2016). *Scaffolding teaching strategies to try today*. Retrieved from <http://www.teachhub.com/5-scaffolding-teaching-strategies-try-today>
- Crowbach, L. J. (1963). Course improvement through evaluation. *Teachers College Record*, 64 (8), 672-683.
- David, J. L. (2010). Teacher expectations of student achievement (TESA). Retrieved from <http://www.tsssa.server288.com/wpcontent/uploads/2010/08/highexpectations1>
- Delaney, J., Johnson, A., Johnson, I. & Tresian, D. (2010). *Students' perceptions of effective teaching in higher education*. Retrieved from www.uwex.edu/disted/conference.
- Fafunwa, A. B. (1974). *History of education in Nigeria*. London: George Allen & Unwin.
- Farrant, J. S. (1988). *Principles and practice of education* (2nd ed.). England: Longman Group UK Ltd.
- Freire, P. (1972). *Pedagogy of the oppressed*. Harmondsworth: Penguin Books.
- Furet, J.B., (1989). *Life of Joseph Benedict Marcellin Champagnat*. Rome: Marist Brothers.

- Glatthorn, A. A. (2005). *Foundations of curriculum*. Washington DC: Sage Publications.
- Gordon, O. (2012). *Developing the curriculum*. New York: Pearson Education Inc.
- Graham, L., Berman, J. & Bellert, A. (2015). *Sustainable learning inclusive*. Retrieved from Practices <http://www.cambridge.org/au/academic/subjects/education/education-history-theory/sustainable-learning-inclusive-practices-21st-century-classrooms>
- Groome, T. H., (1981). *Christian religious education*. New York: Fitzhenry & Whiteside.
- Hasegawa, K. B. (2014). *Curriculum design and organisation*. Holy Angel: University Press.
- Hass, G. (1983). *Curriculum planning: A new approach*. USA: Allyn and Becon Inc.
- Hong, K. S., Ridzuan, A. A. & Kuek, M. K. (2003). Students' attitudes towards the use of the internet for learning: A study at a University in Malaysia. *Educational Technology & Society*, 6 (2), 45-49.
- Hussain, I. (2012). Use of constructivist approach in higher education: An instructor's observation. *Creative Education*, 3 (2), 179-183.
- International Marist Education Commission (1998). *In the footsteps of Marcellin Champagnat: A vision for Marist education today*. Sidney: Institute of the Marist Brothers of the Schools.
- Ivowi, U. M. O. (1994). Curriculum development process. In D. Ajeyalemi & B. Adegoke (Eds.), *Fundamentals of curriculum development* (p. 29-47). Abuja: Nigerian Educational Research and Development Council.
- Iwuchukwu, C. B. (2003). *Philosophy of education: A first course*. Owerrri: Cel-Bez.
- Janneke, P., Monique, V., Frans, O. & Jos, B. (2015). The effects of scaffolding in the classroom: Support contingency and student independent working time in relation to student achievement, task effort and appreciation of support. *Instr Sci*, 43 (1), 615-641.
- John-Steiner, V. & Mahn, H. (1996). Sociocultural approaches to learning and development: A Vygotskian framework. *Educational Psychologist*, 31(3/4), 191-206.

- Jones, R. C. (2012). *The instructor's challenge: Moving students beyond opinions to critical thinking: Faculty focus*. UK: Magna Publications.
- Kamau, R. R. & Changilwa, P. (2013). *Curriculum development: A self-study material for the bachelor of education degree programme, Catholic University of Eastern Africa*. Nairobi: CUEA Press.
- Kathleen, M., Bailey, A. & Nunan, D. (1996). *In or out of the action zone. Voices from the language classroom*. Cambridge: CUP.
- Kerr, J. (1968). *Changing the curriculum*. London: University of London Press.
- Knapper, C. (2006). *Lifelong learning*. Retrieved from <http://www.sciencedirect.com/science/article/pii/S1877042809000688>
- Mager, R. F. (1975). *Preparing instructional objectives* (2nd ed.). California: Pitman Publishers.
- Majawa, C. (2014). *Patristic education*. Nairobi: Scroll Technologies.
- Marmah, A. A. (2014). Students' perception about the lecture as a method of teaching in tertiary institutions: Views of students from College of Technology Education, Kumasi (COLTEK). *International Journal of Education and Research*, 2 (6), 22-35.
- Mbakwem, J. N. (2005). *Curriculum implementation and instructional plan*. Owerri: UpTHRUST.
- Marist Brothers of the Schools (2011). *Constitutions and statutes*. Rome: Marist Brothers.
- McMahon, J. R., (1992). *Educational vision: a Marist perspective* (Doctoral dissertation). London: University of London Institute of Education.
- Mkpa, M. A. (1984). *Curriculum design and instructional evaluation*. Ibadan: Evans Brothers Ltd.
- Mkpa, M. A. (1984). *Curriculum development and implementation*. Owerri: Totan Publishers.
- Mvumbi, F. N. (n.d). *When the Church Fathers speak of education*. Nairobi: CUEA.
- Ngara, E. (1995). *The African university and its mission*. Lesotho: Moriga Printing Press.
- Nicholls, A. & Nicholls, S. H. (1980). *Developing a curriculum: A practical guide*. London: George Allen and Unwin Ltd.

- Nunan, D. (1988). *Innovation in English language teachings*. London: Routledge.
- Nyagah, G. (2005). *Curriculum studies*. Nairobi: African Virtual University.
- Obasi, V. A. (2009). *Curriculum design and strategy*. Owerri: BOND Computers.
- Oluoch, G. P. (2006). *Essentials of curriculum development*. Nairobi: Longhorn.
- Okpala, P. N. & Onocha, C. O. (1994). *Concept of educational evaluation*. Edo State: Stirling-Holding Publishers.
- Omoro, B. (2014). Determining methods used in teaching Geography in secondary schools in Rongo District, Kenya. *International Journal of Academic Research in Progressive Education and Development*, 3 (1), 220-232.
- O'Neill, G. (2010). *Programme design: Overview of curriculum models*. London: UCD
- Onwuka, U. (Ed.) (1981). *Curriculum development for Africa*. Onitsha: Africana Publishers Ltd.
- Osuji, G. E. (2008). *A man for our times: a call to Marist Brotherhood*. Orlu: NTrinity Press.
- Osuji, G. E. (2017). *Influence of Christian Religious Studies implementation on students character formation in public secondary schools in Owerri Municipal, Imo State, Nigeria* (Doctoral Dissertation). The Catholic University of Eastern Africa, Nairobi, Kenya.
- Osuji, G. E. & Suleh, E. O. (2015). Role of institutions of higher learning in enhancing sustainable development in Kenya. *Journal of Education and Practice*, 6 (16), 91-102.
- Osuji, V. E. (2015, July 29-31). *Sustaining and transmitting Marist pedagogy*. Paper presented at the Seminar for Marist Educators, Marist Formation Centre, Orlu, Imo State, Nigeria.
- Pavlova, M. (2012). Teaching and learning for sustainable development: ESD research in Technology education. *International Journal of Technology & Design Education* 23, 733-748.
- Per, K. & Osborne, J. (2016). *Transforming pedagogy in physics teaching. Intervention material for physics teachers in Colleges of Teacher Education*. NY: Sage.

- Provus, M. (1971). *Discrepancy evaluation for educational programme improvement and assessment*. California: McCutchar.
- Radford, J., Bosanquet, P., Webster, R. & Blatchford, P. (2015). Scaffolding learning for independence: Clarifying teacher and teaching assistant roles for children with special educational needs. *Learning and Instruction*, 36 (1), 1-10.
- Reyes, F. (2000). *Engineering the curriculum. A guide for educators and school managers*. Manila: De La Salle University Press, Inc.
- Richards, J. & Lockhart, C. (2006). *Reflective teaching in 2nd Language classrooms*. Cambridge: Cambridge University Press.
- Saunders, G. & Pincas, A. (2004). *Students' attitude towards information and communication technologies in teaching and learning in the UK*. Retrieved from [www.itdl.org/journal/Aug-04/artical 01.htm](http://www.itdl.org/journal/Aug-04/artical%2001.htm)
- Schultz, T. W. (1980). Investment in entrepreneurial ability. *Scandinavian Journal of Economics* Wiley Blackwell, 82 (4), 437-438.
- Schwänke, U. & Plaskitt, R. (2009). *Sustainable learning – How storyline can support it*. Paper presentation at the Nordic Storyline Conference, in Gothenburg.
- Seligson, P. (2008). *Videos on classroom management*. Retrieved from <http://www.youtube.com/watch?v=4L8J34Mekc8>
- Shiundu, J. S. & Omulando, S. J. (1992). *Curriculum: theory and practice in Kenya*. Nairobi: Oxford University Press.
- Sifuna, D. N, Chege, N. F. & Oanda, O. I. (Eds.) (2006). *Themes in the study of the foundations of education*. Nairobi: Jomo Kenyatta Foundation.
- Sifuna, D. N. & Otiende, J. E. (2006). *An introductory history of education*. Nairobi: University Press.
- Stipek, D. (2002). *Motivation to learn: Integrating theory and practice*. Boston: Allyn and Bacon
- Suleh, E. O. (2014). Methods of increasing speaking activities in the classroom (maximising student input and involvement). *Journal of Education and Practice*, 5 (7), 73-81.
- Taba, H. (1962). *Curriculum development: Theory and practice*. New York: Harcourt Brace and World.

- Tanner, D. & Tanner, L. N. (1975). *Curriculum development*. New York: MacMillan.
- Thomas, I. (2004). Sustainability in tertiary curricula: What is stopping it happening? *International Journal of Sustainability in Higher Education*, 5 (1), 33 – 47.
- Thornbury, S. (2005). *How to teach speaking*. Harlow, England: Longman.
- Tyler, R. (1949). *Basic principles of curriculum and instruction*. Chicago: University Press.
- Ughamadu, K. A. (1992). *Curriculum: Concept, development and implementation*. Onitsha: Emba Ltd.
- Ukeje, B. O. (1979). The role of the school in a changing society. In B. O. Ukeje (Ed.), *Foundations of Education*. Benin-City: Ethiopia Publishing Corporation.
- Unamma, A. O. (2008). *Curriculum designs, resources and innovative strategies*. Aba: Amandera Educational Publishers.
- UNESCO, (1997). *Educating for a sustainable future: A transdisciplinary vision for concerted action*. New York: UNESCO.
- Verenikina, I. (2008). Scaffolding and learning: Its role in nurturing new learners. *Research Online*, 3 (2), 161-180.
- Vygotsky, L. S. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.
- Williams, E. (2011). Language policy, politics and development in Africa. In H. Coleman (Ed.), *Dreams and Realities: Developing Countries and the English Language*, (pp. 43-44). London: British Council.
- Wheeler, D. K. (1967). *Curriculum process*. London: Hodder and Stoughton.
- Yoloye, E. A. (1980). *Developing and under-developing in education*. Ibadan: University Press.
- Yousef, M. & Balaramulu, D. (2013). Students' attitude towards teachers' behaviour in Hyderabad University. *International Journal of scientific research publications*. 3(6), 18-26.
- Yunus, S. A. S. (2015). *Curriculum development and models*. Zanzibar: SUZA.