BENSARK

UNIT 1: THE CONCEPT OF CURRICULUM

1.1 Definition of curriculum (What is curriculum?)

Etymological point of view: The term curriculum was derived from the Latin word "currere" meaning "to run" or "to proceed". "Curriculum" as a Latin word means "a race" or "the course of race". Over here, education is the race, and curriculum is the course.

Curriculum can broadly be defined from two main viewpoints; prescriptive and descriptive points of view. However, to get a clearer picture of the concept both viewpoints need merging in order to come up with a suitable definition for the concept. Below are sample definitions of curriculum from **prescriptive perspective**:

- Bobbitt (1918; p.43) states that "Curriculum is the entire range of experiences, both directed and undirected, concerned in unfolding the abilities of the individual."
- Tyler (1957) defines curriculum as all the learning experiences planned and directed by the school to attain its educational goals.
- Curriculum means the planned interaction of pupils with instructional content, materials, resources, and processes for evaluating the attainment of educational objectives (Indiana Department of Education, 2010).

NOTE: Prescriptive [curriculum] definitions provide us with what "ought" to happen, and they more often than not take the form of a plan, an intended program, or some kind of expert opinion about what needs to take place in the course of study.

Among the definitions given or proposed by past experts operating in the premises of **descriptive** are given as below:

- Caswell & Campbell (1935) define curriculum as all the experiences children have under the guidance of teachers.
- 2. Ragan (1960) also perceives curriculum as all experiences of the child for which the school accepts responsibility.
- 3. The set of actual experiences and perceptions of the experiences that each individual learner has of his or her program of education (Hass, 1987).
- 4. Silva (2010) sees curriculum as an emphasis on what students can do with knowledge, rather than what units of knowledge they have, is the essence of 21st -century skills.

NOTE: The descriptive definitions of curriculum go beyond the prescriptive terms as they create the impression that the curriculum *is not merely about how things ought* to be but rather how things are in real classrooms (Ellis, 2004). Another term that could be used to define the descriptive curriculum is **experience**.

The following authors tend to define curriculum from both prescriptive and descriptive points of view:

- Curriculum refers to all the learning which is planned and guided by the school, whether it is carried on in groups or individually inside or outside of the school (Kerr, 1968).
- 2. It can be described as all learning experiences that learners are to go through

under the guidance of the school at the end of an educational programme.

- 3. Curriculum can broadly be defined as the totality of students' experiences that occur in the educational process.
- Curriculum can be seen as a group of subjects or courses of study arranged in particular sequence for instructional purpose in school.

NOTE: These proposed definitions tend to acknowledge the fact that curriculum encompasses both process (plan) and experience in the context of education.

1.2 Components/Elements of Curriculum

According to Brady (1995) and Nunan (1988) as cited in Shao-Wen (2012) the curriculum development process generally entails four (4) elements: *objectives, content, methods, and evaluation*. Since curriculum is planned for a particular educational programme, it is therefore highly anticipated to have at least some of these major components:

- 1. Statement of philosophy of the educational programme
- 2. Objectives, aims and goal of the programme
- 3. Subject matter or content
- 4. Learning experiences
- 5. Mode of instruction (instructional strategies, teaching methods, techniques, etc.)
- 6. Assessment and evaluation of the programme (evaluation approaches)
- 7. Duration for the programme

8. Outcomes

Basically, the curriculum must include all subject matter, teaching strategies, learners' experiences and assessment of students which a particular school plans for its students which is developed by the members of its own curriculum committee. The curriculum is well planned, guided and designed by the government or the educational institution. It is aimed at both physical and mental development of the student. It is the overall learning experience that students go through during a particular course of study.

TYPES OF CURRICULUM	EXAMPLES OF CURRICULUM
1. Subject-based/oriented curriculum	 English, Mathematics, ICT, Science, History, Geography, Economics, etc.
2. Core curriculum	2. English, Mathematics, ICT, Science
3. Hidden curriculum	3. Sports, music, language, morals, etc.
4. Official curriculum	etc.
5. Unofficial curriculum	
6. Objective-based curriculum	
7. Standard-based curriculum	
8. Experienced-based curriculum	

9. Competence-based curriculum

1.3 Curriculum Frameworks

Every curriculum regardless of its type ought to follow series of guidelines. These guidelines are referred to as the curriculum frameworks. In Ghana, there are currently only two curriculum frameworks driving pre-tertiary education and tertiary education (particularly teacher education). They are

- a) The Pre-Tertiary Education Curriculum Framework (PECF)
- b) The National Teacher Education Curriculum Framework (NTECF)

1.4 SYLLABUS

Etymology: The word "syllabus was derived from modern Latin "syllabus" meaning "list". It was originally carved out from the Greek word "sittybas" meaning "parchment table or table of content." The change from "sitty" to "sylla" is explained as a hypercorrection by analogy to "syllambano" which means "bring together" or "gather".

Definition: The syllabus or specification is an academic document that communicates information about a specific subject and defines expectations and responsibilities. The syllabus is descriptive in nature unlike the curriculum which prescriptive. A syllabus may also be defined as a document that consists of topics or portion covered in a particular subject.

A syllabus can be tailored for a class or a number of classes e.g. Classes 1-3 or 4

-6. A syllabus is considered as a guide to the teacher as well as to the students. It

helps the students to know about the subject in detail, while it is a part of their course of study, what expectations of students are, etc. It contains general rules, policies, instructions, topics covered, assignments, projects, and so on. The syllabus is prepared by the National Council for Curriculum and Assessment (NaCCA) formerly Curriculum Research Development Division (CRDD).

Examples:

- a) Teaching syllabus for English Language for Junior High School 7-3
- b) Teaching syllabus for Mathematic for JHS 1-3

Old syllabus

- c) Teaching syllabus for Religious and Moral Education for JHS 1-3
- d) Standard-based curriculum for English Language Primary 1-6
- e) Standard-based curriculum for Mathematics Primary
 syllabus
- f) Standard-based curriculum for Our World Our People

According to Hoesny (2013), Syllabus has 17 possible functions which include:

- 1. Describing course content scope
- 2. Communicating course focus
- 3. Suggesting prerequisites
- 4. Detailing logistics
- 5. Identifying course goals
- 6. Sequencing/scheduling instruction
- 7. Identifying performance objectives

- 8. Constituting a contract
- 9. Identifying reference material
- 10. Providing modifications base
- 11. Motivating students
- 12. Permitting self-monitoring
- 13. Facilitating optional learning activities
- 14. Establishing evaluation system
- 15. Advertising/promoting/recruiting clientele
- 16. Serving as an articulation tool
- 17. Meeting accreditation requirements

Activity

- 1. Define curriculum from these viewpoints:
 - a) Descriptive
 - b) Prescriptive
 - c) Descriptive and Prescriptive (Both viewpoints)
- 2. Identify any three (3) components of curriculum.
- 3. What are curriculum frameworks? Mention any two curriculum frameworks basic education and college education.
- 4. Explain the term syllabus.
- 5. Write any three (3) examples of curriculum and syllabus.
- 6. Identify any four (4) features of a syllabus

UNIT 2: DISTINCTION BETWEEN CURRICULUM AND SYLLABUS

2.1 Differences between syllabus and curriculum

Two educational concepts which are often misinterpreted are curriculum and syllabus. Syllabus relates to the subjects as well as the topics covered in the course of study; however, curriculum implies the chapters and academic content taught in school or college. It also refers to the knowledge, skills and competencies students should learn during study. Ideally, the thin line between curriculum and syllabus is that curriculum broadly deals with the total development of a student whereas syllabus focuses on a particular subject. Again, another main difference between these two concepts is that one is broader whiles the other is narrower. The differences between the two concepts are highlighted in the table below:

Basis for Comparison	Syllabus	Curriculum
Meaning	Syllabus is the document that contains all the portion of the concepts covered in a subject.	Curriculum is the overall content taught in an educational system or a course. It contains all syllabi and other co-curricular activities.
Etymology	Syllabus is a Greek term.	Curriculum is a Latin term.
Set for	A subject	A course of study
Nature	Explicitly descriptive	Explicitly prescriptive or both prescriptive and descriptive
Scope	Narrow	Wide
Set out by	Exam board or NaCCA	Government/ GES and the administration of school or institute. Sometimes; students.

Term	For a fixed term, normally a year.	Till the end of the course or programme.
Uniformity	Varies from subject to subject.	Same for the entire institution.

2.1.1 Meaning/conceptualization of syllabus and curriculum

Syllabus refers to the programme or outline of a course of study. In other words, syllabus connotes the portions of the study prescribed in a particular subject meant for a particular course of study. For example, if General Curriculum Studies is a subject meant for a course of study called 'structure and content of curriculum', then the portions of study prescribed in the subject of General Curriculum is called as syllabus. Curriculum on the other hand pertains to the entire period of study in a college or a school. The latter term (curriculum) is also used to denote the subjects that are studied or prescribed for study in a school or college. For example, the curriculum of a certain course of study, say B.Ed. Primary Education, includes all the subjects, including the allied subjects as part of the entire course of study. In brief, curriculum is the overall content taught in an educational system or a course. It contains all syllabi and other co-curricular activities.

2.1.2 Etymology of curriculum and syllabus

The term curriculum was derived from the Latin word <u>"currere"</u> meaning "to run" or "to proceed". <u>"Curriculum"</u> as a Latin word means "a race" or "the course of race". Meanwhile, the word 'syllabus' was originally carved out from the Greek word "sittybas" meaning "parchment label or table of content." The change from "sitty" to "sylla" is explained as a hypercorrection by analogy to "syllambano" which means "bring together" or "gather". The word "syllabus" was then adapted by modern Latin to mean "list". In short, from etymological point of view curriculum has its root word from Latin whereas

syllabus can be traced from the Greek origin.

2.1.3 Nature of curriculum and syllabus

Curriculum is explicitly prescriptive in nature; however, it may also appear both prescriptive and descriptive in some cases. Meanwhile, syllabus is explicitly descriptive. The prescriptive nature of curriculum means that it is a planned phenomenon; it involves or takes into consideration opinions of experts and specifies what ought to happen in the domains of education. Again, curriculum as both prescriptive and descriptive means that curriculum goes beyond all planned learning experiences to include the very natural experiences happening in real classrooms. On the other hand, syllabus is descriptive in nature. This implies that syllabus tends to comprehensively communicate information about subjects and topics enshrined in a particular of a course study.

2.4.1 Scope of curriculum and syllabus

Curriculum has a wider scope whereas syllabus has a narrowed scope. The scope of curriculum is always said or seen to be wide or broad because the concept is not limited to content, outcomes or objectives. Curriculum goes a step further by taking into account environment or situation analysis which investigates all kinds of human and physical resources available to achieve educational goals. Nonetheless, syllabus is narrow in terms of scope in the sense that it is largely concerned with the information about the topic or subject to be studied in the course of a study. It does not take into consideration available educational logistics such as materials, equipment, facilities, personnel, time, cost among others.

2.1.5 Developmental Body/Institution (Curriculum vs. Syllabus)

Curriculum is set out or developed by the school, students or a body appointed or mandated by the government. Syllabus on the other hand is designed or set out by a body appointed by the government and an exam board in some cases. For example, in Ghana, teaching syllabi are explicitly drafted by the National Council for Curriculum (NaCCA) but the curriculum is not developed solely by the National Council for Curriculum (NaCCA) but other agencies like the school administration and the student body come in to play as well. For instance, the Ghana Education Service in collaboration with the National Curriculum and Assessment (NaCCA) may develop the taught curriculum; the school administration may also develop official curriculum whiles the student body may come up with a hidden curriculum.

2.1.6 Term/Duration of syllabus and curriculum

Syllabus is set to run for a fixed/specified period or term; however, curriculum is rolled till the end of the course or programme. Syllabus often runs for a year period but curriculum is expected to be in use until the educational programme fades out. For example, in Ghanaian basic schools, every teaching syllabus is year bound because the teaching syllabus used for instruction in Basic 1 cannot be used for instruction in Basic 2 and vice versa. Curriculum on the other hand is dependent on the longevity of the course of study in the Ghanaian basic schools.

2.1.7 Uniformity (Syllabus vs. Curriculum)

Syllabus varies from subject to subject whereas curriculum is same for the entire institution/school. In other words, syllabus is not same with all teachers but curriculum

is uniform for all teachers in a school. For instance, teaching syllabus for English language for Upper Primary is not same as teaching syllabus for Mathematics for Upper Primary but the curriculum remains same for all teachers who teach at the upper primary level. In other words, a teacher teaching a subject say, Ghanaian Language in a basic school is restricted to the use of Ghanaian Language syllabus whereas another teacher teaching ICT in the same school is bound to ICT teaching syllabus for instruction. Meanwhile, the curriculum running in the institution is not different from the subjects being offered likewise the teachers teaching the subject; it is same for the entire institution.

In a nutshell, syllabus is set for a subject but curriculum is set for a course of study. Although the two concepts are among the most misconstrued terms in the field of education, the differences between them are to some degree obvious especially when we tackle them from their various meanings, roots/origin/etymological viewpoint, scope, nature, term/duration and uniformity.

Activity

- 1. Outline any five (5) differences between a curriculum and a syllabus.
- 2. Examine five (5) ways that make syllabus distinct from a curriculum.

UNIT 3: THE STRUCTURE AND CONTENT OF THE CURRICULUM

3.1 The Structure and Content of the Pre-tertiary Education Curriculum in Ghana

Every developed curriculum is basically woven around two central parts; structure and the content. The structure looks at the various stages alongside their corresponding duration whiles the content is about the various subjects and/or activities designed for learners to go through.

Until recently, formal Basic Education was for all Ghanaian pupils from KG to JHS 3 (Grade 9), after which learners could progress to formal Senior High education, vocational education and training, direct entry to employment or distance learning. However, in the current education reforms, Basic Education has been redefined as a concept to include Senior High School, and the system sub-divided into five key phases as follows:

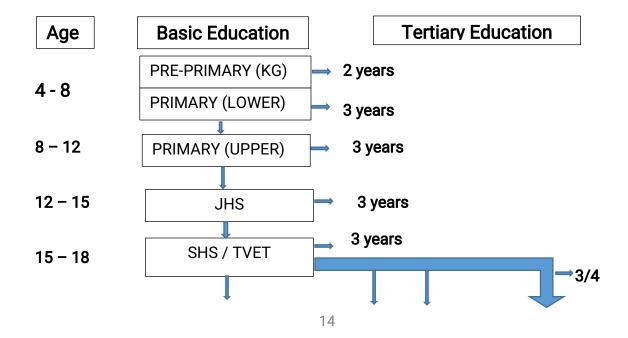
Key Phase 1 [Foundation level comprising Kindergarten 1 & 2]
 Early Years

- 2. Key Phase 2 [Lower primary level made up of B1 to B3]
- 3. Key Phase 3 [Upper primary level of B4 to B6]
- 4. Key Phase 4 [Junior high school level of B7 to B9]
- 5. Key Phase 5 [Senior high school level comprising SHS1- SHS3].

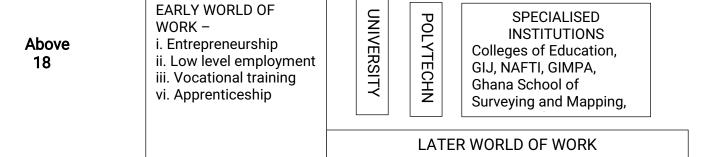
Key Phases 1 and 2 constitute Early Years.

3.1 The structure of the Ghanaian basic school curriculum

Figure 1 displays the structure of pre-tertiary education in Ghana.



years



Source: adapted from the Pre-Tertiary Education Curriculum Framework, National Council for Curriculum Framework (NaCCA).

3.1.1 Structure Explained

Education at Key Phase 1 begins at age 4 with Kindergarten (KG) education and connects with Lower Primary education up to age 8. KG education pre-disposes children to conditions of formal schooling, imbuing in them the desire for learning during future years. The second, or Upper Primary phase, seeks to lay a strong foundation for inquiry, creativity and innovation, and lifelong learning in general, and to provide building blocks for higher levels of education (Anamuah-Mensah Report, 2002).

The third phase of basic education is the three-year Junior High School or JHS (age 12-15 years) which is lower secondary education and provides the opportunity for pupils to discover their interests, abilities, aptitudes and other potential. The final phase of basic education is the three-year SHS (age 15-18 years), which is upper Secondary education and allows learners to specialise in any one of the following programmes: Science, General Arts, Technical and Vocational, Business, and a not less than one-year appropriate apprenticeship training programme.

The SHS education is the platform that delivers an extensive gamut of academic

knowledge and skills required for entry into further education and training in the tertiary institutions of Ghana and elsewhere. In this context, after sitting and passing the West Africa Secondary School Certificate Examination (WASSCE) conducted by the West African Examination Council (WAEC), SHS graduates may gain admission into the Universities, Polytechnics and such specialised institutions as Nursing Training Colleges, Colleges of Education and Ghana Police Command.

3.2 The content of the Ghanaian basic school curriculum

Table 1: Content of the Pre-Tertiary Education Curriculum

Level	Number of subjects offered by student	Subjects / Pillars	
Early Years (KG 1 KG2)	4	 ✓ Numeracy ✓ Language and Literacy (using dual immersion approaches) ✓ Creative Arts ✓ Our World Our People (Integrated Themes: History, RME, Geography, Science, Physical Education [P.E.]) 	
Lower Primary (B1-B3)	6	 ✓ Numeracy ✓ Language and Literacy (using dual immersion approaches) ✓ Science ✓ Creative Arts (Visual, Performing Arts & Life Skills) ✓ History ✓ Our World Our People (*RME, Agriculture, Computing, Geography, Physical Education 	
Upper Primary (B4-B6)	8	 ✓ Mathematics ✓ Literacy (English [subject & medium of instruction], Ghanaian Language and French) ✓ Science ✓ Creative Arts (Integrated Themes: Music, Arts, Financial Literacy, Drama, Dance, Visual Arts) ✓ History ✓ Our World Our People (*R.M.E, Agriculture, Geography, Civics) 	

Source: adapted from the Pre-Tertiary Education Curriculum Framework, National Council for Curriculum Framework (NaCCA).

3.2.1 Content Explained

The content of the Pre-Tertiary Education curriculum comprises multiple elements/components; level, number of subjects, subjects/pillars, assessment and evaluation procedures, instructional time duration among others. Each level has definite number of subjects that learners are expected to offer. The number of subjects increases as learners progress from one level to another. However, instructional time duration (period) remains same for some of the levels but increases at certain stages.

At the early years or kindergarten level (KG 1 & KG 2), learners are to offer four (4) subjects; Literacy, Numeracy, Creative Art and Our World, Our People with these integrated themes: History, RME, Geography, Science, Physical Education (P.E.) in a span of two years.

The Lower Primary level (B1-B3) are to offer six (6) subjects; Numeracy, Language and Literacy (using dual immersion approaches), Science, Creative Arts which basically shall focus on these three (3) aspects: Visual, Performing Arts and Life Skills, History, and Our World Our People with the following integrated themes: *RME, Agriculture, Computing, Geography and Physical Education. Religious and Moral Education (R.M.E.) will however be an optional theme under this very subject (Our World Our People) at this level. More so, this is the level where learners are to be exposed to digital literacy hence the introduction of the subject 'Computing'.

At the Upper Primary (B4-B6), eight (8) subjects are to be offered in all. They are Mathematics, Literacy, which shall comprise English language, Ghanaian Language and French. At this level, English language will be used as the medium of instruction. The remaining subjects include Science, Creative Arts with six (6) integrated themes: Music, Arts, Financial Literacy, Drama, Dance and Visual Arts, History, Our World Our People with at least four (4) integrated themes; *R.M.E, Agriculture, Geography and Civics, Computing and Physical Education. Religious and Moral Education (R.M.E.) will however be an optional theme as well under this very subject (Our World Our People) at this level.

There are nine (9) subjects mounted to be offered at the J.H.S. level. They are Literacy (Ghanaian Lang., (English Lang. Arts, French or Arabic), Mathematics, Science, History, Geography, Our World Our People (*Religion, and Moral Education, Civics, Agriculture and Geography), Creative Design and Technology (Visual Art, Home Economics and Pre-Tech.), Computing with emphasis on application and Physical Education. At this level, learners have the opportunity to choose whether they would

want to offer/study French or Arabic. Religious and Moral Education (R.M.E.) will continue to be optional whereas the introduction of Creative Design and Technology shall focus on Visual Art, Home Economics and Pre-Technical Skills. Furthermore, digital literacy instruction or 'Computing' shall emphasize on application.

3.3 Assessment, Evaluation and Grading Components of the Curriculum

3.3.1 Assessment Component

Assessment is the process of gathering information for decision making about learners, curricula, programmes and educational policies. The assessment procedures spelt out in the Ghanaian basic school curriculum are driven by general principles of assessment and Principles for Fair Student Assessment Practices for Education in Ghana. These are a set of principles and related guidelines generally accepted by professional organisations as indicative of fair assessment practice within the Ghanaian educational context.

Assessment procedures vary from one curriculum phase to the other. In other words, modes of assessment are not same for all the key phases (levels). They are a key part of the standards-based curriculum process because those developing curricula must decide what they are going to accept as evidence that learners have met the standards (Lund & Tannehill, 2014). They also decide at what point(s) learners are going to demonstrate competences. The table below shows the assessment format in the pre-tertiary curriculum:

Key Phase	Mode of	Type of	Form of Assessment
(Level)	Assessment	Assessment	
Key Phase1:			Five (5) or six (6) informal
Early Years	Informal	Formative	continuous assessment
(KG 1 – KG 2)			activities
			1. Six formal

Key Phase 2 & 3: Lower Primary & Upper Primary (BS1 - BS3) & (BS4 - BS4)	Formal	Formative Summative	continuous assessment activities 2. End-of-term exam 3. End-of-year exam (internal exam) for upper primary 4. The National Standards Assessment Test (NSAT) – at the end of BS 2 and BS3 (compensation provision) with emphasis on numeracy and literacy; at the end BS 4 and BS 6 with emphasis on numeracy, literacy and science.
Key Phase 4 BS7 - BS 9 (JHS 1-3)	Informal and formal	Formative Summative	 End-of-year tests in the examination subjects for BS7 and BS8 External examination in all examination subjects at the end of BS 9. The National Standards Assessment Test (NSAT) – at the end of BS 8 with emphasis on upper primary subjects in addition to History, Geography,

	Computing and
	Languages.

Table 2

3.3.1.1 Assessment components explained

The pre-tertiary curriculum also presents similar assessment procedures. The curriculum takes into consideration all the various types, forms and modes of assessment (formative, summative, diagnostic, formal and informal, continuous, etc.). However, each curriculum phase undergoes quite different assessment procedure or format.

At the Early Years Phase/Key Phase 1 (KG 1 – KG 2), assessment should be informal and formative. The assessment procedures should be based on five (5) or six (6) continuous assessment activities. That is, teachers are to evaluate learners' performance from the outcome of these specified continuous assessment activities. No end-of-term tests should be written at this stage but five or six informal more structured assessments should be done twice per term.

Key Phases 2 & 3 are characterized by formal mode of assessment. Assessment ought to be formative and summative. This level calls for at least six formal continuous assessment activities to be conducted, recorded and graded. Forms of summative assessment at this level will include end-of-term examination, end-of-year examination and the National Standard Assessment Test (NSAT) at the end of each curriculum phase. End-of-year examination should be internal and be given in the Upper Primary examination subjects. The NSAT will be conducted at the end of BS 2 with a compensation provision in BS 3 for low achievers. The emphasis of this test at this

level shall be on numeracy and literacy. At the end of BS 4 and BS 6, the focus of the NSAT shall be on numeracy, literacy and science.

Key Phase 4 is characterized by both formal and informal modes of assessment. Assessment should be both formative and summative at this phase. Continuous assessment activities are also considered at this level but the number of continuous assessment activities to take, record and grade are determined by the subject curricula. There should be end-of-year tests conducted in the examination subjects for BS 7 and BS 8. Again, The National Standards Assessment Test (NSAT) will be conducted at the end of BS 8 with emphasis on upper primary subjects in addition to History, Geography, Computing and Languages. Lastly, this level will be characterized by external examination in all examination subjects at the end of BS 9 (J.H.S).

3.3.2 Evaluation Component of the Curriculum

Evaluation can be defined as the process of assigning judgmental value to performance against a standard-based criteria. Information obtained from formal and informal continuous assessment form the basis for the evaluation procedure in this curriculum. The curriculum makes use of the 'criterion-referenced grading system' to determine the true reflection of learners' performance/achievement.

In criterion-referenced assessment, each letter grade must have a descriptor for what the learner must demonstrate in order to be awarded the grade. Teachers are encouraged and expected to develop 'Grade Descriptors' for each subject for each year under this curriculum. The evaluation procedure for the key phases is shown below:

Table 3: Key phase 2 (for National Standards Assessment Test, this refers only to Basic

Year 2)

Grade	Marks Range	Grade Descriptor
Α	80+%	Achieved Basic Competences exceptionally well. The learner
		is outstanding in all areas of competency.
В	65% - 79%	Achieved Basic Competences well. The learner is highly
		proficient in most areas of competency, e.g. demonstrating
		rapid mastery of some competences, or being able to apply
		competences to unknown situations or contexts or
		demonstrating new insight.
C	45% - 64%	Achieved Basic Competences. The learner has mastered the
		competences satisfactorily in known situations and contexts.
D	30% – 44%	Achieved the minimum number of Basic Competences to be
		considered competent. The learner may not have achieved all
		the competences, or may sometimes need help, but has
		sufficient competency to go on to the next grade.
E	0% – 29%	Not achieved majority of the Basic Competences. The learner
		has not been able to reach a minimum level of competency,
		even with extensive help from the teacher, and needs
		learning support.

The learner's summative achievement in the basic competences in each subject will be shown by letter grades A-E, where A is the highest and E the lowest grade. As far as possible, a letter grade should be used directly as the marks. The relationship between the letter grades and basic competences is shown in Table 3. The evaluation procedure in Table 3 is for Lower Primary but it is only applicable to only Basic 2 in the National Standard Assessment Test (NSAT).

Table 5: Key Phase 3 (Basic Year 4 to 6) and Phase 4 (Basic Year 7 to 9)

Grade	Marks Range	Grade Descriptor		
Α	80+%	Achieved Basic Competences exceptionally well. The learner		
		is outstanding in all areas of competency.		
В	65% - 79%	Achieved Basic Competences well. The learner is highly proficient in most areas of competency, e.g. demonstrating rapid mastery of some competences, or being able to apply competences to unknown situations or contexts or demonstrating new insight.		

С	45% - 64%	Achieved Basic Competences. The learner has mastered the
		competences satisfactorily in known situations and contexts.
D	30% - 44%	Achieved the minimum number of Basic Competences to be considered competent. The learner may not have achieved all the competences, or may sometimes need help, but has
		sufficient competency to go on to the next grade.
Е	0% - 29%	Not achieved majority of the Basic Competences. The learner has not been able to reach a minimum level of competency, even with extensive help from the teacher, and needs learning support.

Source: adapted from the Pre-Tertiary Education Curriculum Framework, National Council for Curriculum Framework (NaCCA).

The learner's summative achievement in the basic competences in each subject will be shown in letter grades A-E, where A is the highest, and E, the lowest grade. The relationship between the letter grades and basic competences is shown in Table 4. As far as possible, a letter grade should be used directly as the mark. The table above shows that evaluation procedures are same for Upper Primary and J.H.S.

3.3.3 Grading Procedure

To improve assessment and grading and also introduce uniformity in schools, it is recommended that schools adopt the following grade boundaries for assigning grades:

Level of Proficiency	Equivalent Numerical Grade	Meaning	Grade descriptor
1	80% +	Advance (A)	Learner exceeds core requirements in terms of knowledge, skills and core understanding; can transfer them automatically and flexibly through authentic performance tasks

2	75 – 79%	Proficiency (P)	Learner develops fundamental knowledge, skills and core understanding; can transfer them independently through authentic performance tasks
3	70 – 74%	Approaching Proficiency (AP)	Learner develops fundamental knowledge and skills and core understanding; with little guidance; can transfer understanding through authentic performance task
4	65 – 69%	Developing (D)	Learner possesses the minimum knowledge and skills but needs help throughout the performance of authentic task
5	64% and below	Beginning (B)	Student is struggling with his/her understanding due to lack of essential knowledge and skills

Source: NaCCA (2019). Teacher Resource Pack. National Council for Curriculum and Assessment

The grading system presented, shows the letter grade system and equivalent grade boundaries. In assigning grades to learners' test results, or any form of evaluation, the above grade boundaries and the descriptors may be applied. The descriptors (Advance [A], Proficient [P], Approaching Proficiency [AP], Developing [D], Beginning [B]), indicate the meaning of each grade.

3.4 COMPARISON OF STRUCTURE AND CONTENT OF BASIC EDUCATION CURRICULUM (EVIDENCE FROM SELECTED ASIAN COUNTRIES)

3.4.1 Structure of Singaporean Basic Education curriculum

Level/Grade	Typical age
Preschool	
Pre- playgroup	3-4
Kindergarten	4-6
Primary school (Children enter P1 upon the year they tu	rn 7)
Primary 1-6	6–12
Secondary school (Children enter S1 upon the year they	turn 13)
Secondary 1-4	12-16
Secondary 5 (available for normal academic stream only) thus prepare student for 'O' level	16-17
Secondary 6 (available for Integrated Programme only) able students skip 'O' level and take 'A' level	17–18
Post- Secondary Education	

Junior Colle	ge, Polytechnic o	r Arts I	nstitution,	followed
by Universit	y education			

Junior College age 16–18, Polytechnic Age 16–19

3.4.1.1 Overview of the Content of the Singaporean School Curriculum

Level	Number of subjects offered by student	Subjects
Kindergarten		 ✓ Language (English and official Mother Tongue) ✓ Numbers, ✓ Development of personal and social skills,(games, music, and outdoor play)
Primary School		
Foundation Stage (Primary 1 to 4)	9	 ✓ Language (English, Mother tongue) ✓ Mathematics ✓ Civic and Moral Education, ✓ Art and Craft, ✓ Music, ✓ Health education. ✓ Social studies, ✓ Physical education, ✓ Science.(Science is taught from Primary 3, age 9 onwards)
		✓ Language (English, Mother tongue)

Orientation Stage (Primary 5 to 6)	10	 ✓ Mathematics ✓ Civic and Moral Education, ✓ Art and Craft, ✓ Music, ✓ Health education. ✓ Social studies, ✓ Physical education, ✓ Science.
Secondary school	6-10	English, Mother Tongue or Higher Mother Tongue Language, Mathematics, one Science and one Humanities Elective being compulsory. Languages group English Language Mother Tongue Languages (Chinese, Malay, Tamil, etc.) Higher Mother Tongue Languages (Higher Chinese, Higher Malay, Higher Tamil, etc.) Humanities group Combined Humanities History Geography Literature in English/Malay/Chinese/Tamil Higher Art (Art Elective Programme) Higher Music (Music Elective Programme) Mathematics & Science group

Elementary MathematicsAdditional Mathematics
Science (Physics, Chemistry), Science (Physics, Biology), Science (Chemistry, Biology) (these 3 combined together is also known as pure science.)
Integrated Sciences
Other subjects
• Art
Design and Technology -opt- a math
Music
Computer Applications
Elements of Business Skills
Food and Nutrition
Principles of Accounts
Economics, Computer Studies, etc.

3.4.2 Structure of Malaysian curriculum

The school system is structured on a 6+3+2+2 model, with six years of compulsory primary education beginning at age seven, followed by three years of lower secondary education, two years of upper secondary, and two years of pre-university senior secondary study.

Level/Grade	Typical age
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Preschool	
Preschool playgroup	3-4
Kindergarten	4-6
Primary school	
Standard 1-6	6-12
Secondary school	
Form 1-5	12-17
Form 6 (Pre-University)	17–19 (Available in some schools)
Post-secondary education	
Tertiary education (College, Polytechnic or University)	Ages vary

3.4.2.1 Content of the Malaysian curriculum

Level	Number of subjects offered by student	Subject
Pre- school		There is no formal preschool curriculum except a formal mandatory training and certification for principals and teachers before they may operate a preschool.
Primary school Year 1 – 3 Level One (Tahap Satu)	10	The curriculum includes study of a first language (<i>Bahasa Melayu</i> , Chinese or Tamil), English as a second language, Islamic education (compulsory for Muslims), mathematics,
Year 4 - 6 Level Two (<i>Tahap Dua</i>).		science, civics/moral education, local studies, physical education, health education, music and visual arts.
Secondary school		

Lower Secondary (<i>Menengah Rendah</i>), Form 1-3	Students study a minimum of eight and a maximum of 13 subjects.	 Core compulsory subjects include Bahasa Melayu, English, Science, history, geography and mathematics.
		Elective subjects include Islamic studies, moral education, life skills, European languages and mother tongue.
		Four core subjects: Bahasa Melayu, English, mathematics, Islamic studies or moral education and history.
		Elective:
Upper Secondary (<i>Menengah Atas</i>) Form 4 - 5		Science stream: chemistry, biology, physics, additional mathematics and English for science and technology.
		Arts stream: integrated science and a range of other non-science subjects as electives.
		Technical stream: mechanical engineering, civil engineering, electrical engineering, agriculture, commerce, food management and fashion studies.
		Vocational stream:

electrics, automotive,

	catering, computer
	programming.

Activity

- Outline and explain briefly the structure of the Ghanaian basic school curriculum (Pre-Tertiary Education Curriculum) taking into consideration these components: key phases, ages, basic education and years to go through each year.
- Identify the content of Ghanaian basic curriculum (Pre-Tertiary Education Curriculum) taking into account these components: levels, number of subjects, subjects/pillars.
- 3. Write the assessment component of the Ghanaian basic school curriculum at each curriculum phase.
- 4. Outline the evaluation component/procedure in National Standard Assessment Test (NSAT) at the curriculum phases.
- 5. Identify the uniform grading procedure recommended in the curriculum for basic schools.

UNIT 4:

4.1 OBJECTIVES OF THE GHANAIAN BASIC SCHOOL CURRICULUM

Every curriculum design has components. Arguably, objectives are among the sensitive elements of every curriculum. Objectives basically refer to anticipated outcome(s) of a particular programme. In other words, they define projections enshrined in a mounted course of study. Curriculum objectives therefore can be viewed broadly as <u>specific statements of educational intention which delineate</u> (describe/draw/explain) either general or specific outcomes (Wilson, 2014).

The Ghanaian basic school curriculum has several stated objectives which guide

teaching and learning and as well define both learning and learners' expectation. The pre-tertiary curriculum framework which is standard-based in form spells out two (2) categories of objectives. They are the general objectives and the specific objectives. The Curriculum Framework has been formulated with a number of broad objectives in mind, which form the basis of all teaching and learning programmes and classroom activities at the basic education level (The Pre-Tertiary Curriculum Framework, 2018). This implies that each subject curriculum has its formulated general objectives and specific objectives.

Ideally, both categories of objectives (i.e., general and specific) in one way or other complement each other to a very large extent. One can therefore say that they walk hand in hand to ensure that learners go through and exhibit prescribed learning experiences at the end of an instructional period or educational programme as spelled in the curriculum. Curriculum objectives should be concise, understandable, measurable and feasible for teachers and learners alike to accomplish.

4.2 General Objectives of the Ghanaian Basic School Curriculum

Basically, general objectives of curriculum are often perceived as refinements of curriculum aims or goals that specify performance standards or those skills and knowledge the learners are expected to be able to demonstrate. They are usually broad predictions or statements about intended educational outcomes. The general objectives outlined in the Ghanaian basic school curriculum take into account core values and attitudes, general competences and standards, cross-cutting issues like inclusivity, subject-specific cross-cutting issues, among others. The Pre-Tertiary Curriculum Framework presents the following broad/general objectives:

- Provide learners with broad up-to-date knowledge, skills, values and attitudes in both existing and new subject disciplines and in a range of foundational literacies.
- 2. Develop in learners the ability to apply what they have learned with confidence and competence in the world of work
- 3. Instil in learners an understanding of Ghana's history, culture and traditions and of their rights and responsibilities as citizens.
- 4. Encourage learners to fully participate in the learning process and to promote learning as a lifelong endeavor
- Encourage and support teachers to engage in creative and dialogic instructional practices
- Promote an inclusive educational system where individual strengths and potentials are valued and maximised, regardless of ethnicity, religion, gender, geographical location or disability.
- 7. Encourage learners to learn mathematics as a foundational building block to learning other subjects.
- 8. Instil in learners the importance of making responsible choices regarding the environment and climate.
- Promote financial literacy to include the development of entrepreneurial skills for all learners.
- 10. Encourage learners to learn a Ghanaian language and a modern foreign language as part of becoming a global citizen.

(Source: NaCCA, The Pre-Tertiary Curriculum Framework, 2018, pp.21-22)

NOTE: These general/broad objectives are the core foundation of all general objectives formulated for every subject curriculum. For example, formulated general objectives for the Mathematics curriculum can be traced from the above stated general objectives. Again, it is important to note that the new subject curricula use the term *'content standard'* for general objectives (NaCCA, Teacher Resource Pack, 2019).

4.3 Specific Objectives of the Ghanaian Basic School Curriculum

The word 'specific' means precise, concise or definite. In relation to specific objectives, one can say that they are specific statements setting measurable expectations for what learners should know and be able to do, described either in terms of learning outcomes, products or performance or processes (UNESCO, IBE, 2019). The specific objectives enshrined in the Ghanaian basic school curriculum consider all the different types of learning objectives as far as teaching and learning is concerned. Specific objectives in the curriculum are stated in behavioural, holistic, non-behavioural and problem-solving terms. They always find their source from stated general objectives. In other words, specific objectives in the Ghanaian basic school curriculum are derived from general objectives.

In the new subject curricula, specific objectives are captured as *'learning/performance indicators'* (NaCCA, Teacher Resource Pack, 2019).

4.4 Relationship between General Objectives and Specific Objectives

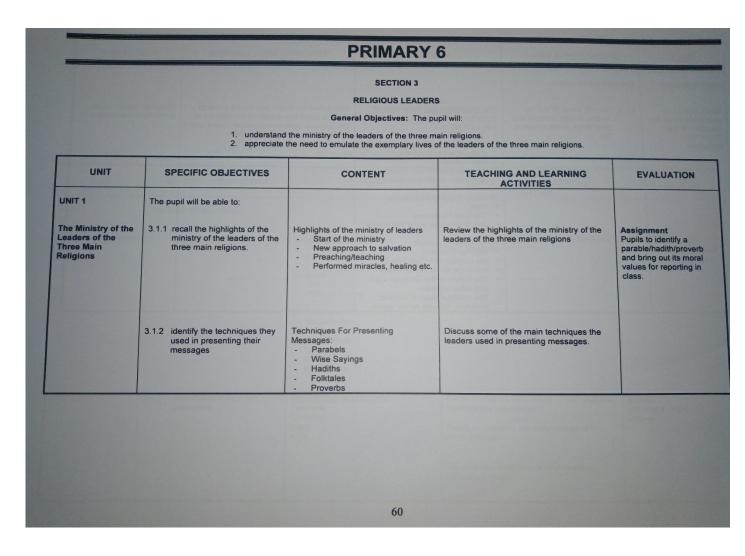
There is a strong linkage between general objectives and specific objectives of the curriculum. This means that both categories exert influence on each other. That is, they walk hand in hand to ensure that learners demonstrate the knowledge, skill and values expected of them at the end of an educational programme. The levels of relationship can be seen in these regards:

- 1. General objectives spell out broad educational expectations and intended learning outcomes. Similarly, specific objectives outline educational intentions in specifics and measurable terms. For instance, a general objective may be stated requiring learners to identify the things in their environment but specific objective may ask learners to mention a number, say three (3) things in their environment.
- General objectives determine specific objectives. In other words, specific objectives are driven by general objectives. That is, specific objectives are carved from general objective statements.
- The realization or achievement of specific objectives obviously leads to the attainment of general objectives. This implies that successful achievement of specific objectives naturally addresses stated general objectives.
- 4. Both objective statements contained in subject curricula take into consideration values and attitudes as well as subject-specific cross-cutting issues. This suggests that every subject curriculum has general objectives and specific objectives but these outlined objectives have been stated to be in line with core values and attitudes such as diversity, equity, respect, truth and integrity, commitment among others.
- 5. General objectives and specific objectives do not operate on different or separate assessment forms and procedures. Rather, they rely on all forms of

- assessment and assessment procedures to determine successful learning across the domains of learning.
- 6. Realization of both objectives largely depends on pedagogical approaches used in lesson delivery. Since the two concepts move together, teachers' teaching methods and other related modes of lesson delivery therefore affect both equally. For example, the use of scaffolding, differentiation or integrated approach to teaching may prove effective in achieving not only specific objectives but the entire general objectives as well.
- 7. General and specific objectives are both stated in verbal terms/forms. This means that both require learners to demonstrated observable learning behaviours before, during and after learning. For example, previously, a general objective was stated as: "The pupil will appreciate the nature of God" and specific objective as: "The pupil will be able to recall the nature of God through His attributes". The underlined words are the verbal forms of objective statements. Similarly, the new subject curricula also state general and specific objectives in verbal terms in content standards and learning/performance indicators respectively. For example, a content standard may have this: "Identify and use question tags correctly in speech" whereas learning/performance indicator may also correspond in this form: "Use positive tags, negative tags and auxiliaries in speech".

Activity:

Study the curricula below and identify their respective general and specific objectives showing as well the relationship that exists among these objectives.



Source: Teaching Syllabus for Religious and Moral Education for Upper Primary (Primary 6) (2012) – Old curriculum





BASIC 4

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1

BASIC 4 STRAND I: ORAL LANGUAGE Sub-Strand I: Songs

CONTENT STANDARDS	INDICATORS AND EXEMPLARS	SUBJECT SPECIFIC PRACTICES AND CORE COMPETENCIES
B4.1.1.1: Demonstrate understanding of variety of songs	B4.1.1.1.1. Listen attentively to songs and sing them with appropriate stress, rhythm and actions Identify a variety of familiar songs from learners' background. Lead learners to sing the songs with appropriate stress, rhythm and intonation.	Listening and Speaking Communication and Collaboration Cultural Identity and Global Citizenship
	B4.1.1.1. 2. Identify and discuss values in songs Select suitable songs for listening, singing/recitation from learners' background. e.g. National Anthem National Pledge Ten Galloping Horses Came Through the Town After they have listened to the songs and also sang them, lead them to identify and discuss the values in the songs.	Creativity and Innovation

NaCCA, Ministry of Education 2019

2

29 / 250 ~

Sub-Strand 3: Poems

GET MORE GREAT APPS! mobisystems

Source: NaCCA (2019). Standard-Based Curriculum for Primary – Basic 4. National Council for Curriculum and Assessment.

Activity

- 1. In your view, how do you understand the term 'curriculum objectives'?
- 2. With reference to the Ghanaian basic school curriculum, what are general objectives of the curriculum?
- 3. What are specific objectives with reference to the Ghanaian basic school curriculum?
- 4. State two (2) objective statements for each of the categories of objectives
 - a) General objectives
 - b) Specific objectives
- 5. Discuss five (5) relationships between specific objectives and general objectives.

UNIT 5

WHY THE STUDY OF THE SCHOOL CURRICULUM?

The development of every curriculum takes several factors into consideration. Crucial among these factors include societal needs (aspirations), time, resources, agents of implementation or personnel (implementers), learner characteristics, among others. However, curriculum process, development and design primarily look up to teachers for its execution. In others, the implementation of the curriculum primarily lies on the shoulders of teachers. This implies that teachers as agents of curriculum implementation need to have adequate knowledge and understanding about the curriculum to ensure effective implementation.

5.1 The Relevance of the School Curriculum to the Teacher

Basically, teachers' knowledge level in the school curriculum will inform their professional values and attitudes, professional knowledge, professional practice as well as the entire educational process/system at large. The relevance of the school curriculum to the teacher can also be witnessed in these regards:

1. Teachers' knowledge in the curriculum will help them to recognize and prioritize the needs and aspirations of societies. Since societal needs and aspirations form the bases of curriculum goals, aims and objectives, teachers' understanding in them will reflect and promote the values which are

important to the societies. For example, The Pre-Tertiary Educational Curriculum Framework outlines core values such as respect, diversity, equity, collaboration, commitment, truth and integrity as the needs of Ghanaian societies. Consequently, teachers' awareness of these will enable them select appropriate contents and pedagogies that address these societal needs.

- 2. It will help teachers to identify and understand the learning needs of learners and apply teaching accordingly. Every curriculum is underpinned by at least a theory which defines learners' characteristics. The Ghanaian basic school curriculum for example is driven by a couple of theories that address diverse developmental stages of learners. Teachers' knowledge and understanding of such theories therefore will help them to structure teaching and learning to meet different learning styles in the classroom. Scaffolding and differentiation are suggested pedagogies for teachers handling mixed ability classrooms.
- 3. It will help teachers to see the need to engage in creative and dialogic instructional practices. The curriculum is designed to encourage and support teachers to engage in creative and dialogic instructional practices. Creativity and confidence (communication) are among the cross-cutting essential learnings of every curriculum. These virtues can only be acquired when learners are exposed to interactive and creative learning environments. By this, teachers will understand that the only way to build confidence and creativity among learners in the classroom is to present them with lessons

that are free and interactive and yet challenging.

- 4. Teachers will recognize and respect the diverse backgrounds of learners.

 The curriculum makes provision for learners' cultural, linguistic, socioeconomic and educational backgrounds. This aspect will therefore encourage teachers to fine tune the teaching and learning process to meet learning needs arising from learners' different cultural, linguistic, socioeconomic and educational backgrounds of learners (National Teachers' Standards for Ghana, 2017).
- 5. It will enable teachers to address the need to promote an inclusive educational system where individual strengths and potentials are valued and maximised, regardless of ethnicity, religion, gender, geographical location or disability (Pre-Tertiary Educational Curriculum Framework, 2018).
- 6. The curriculum informs teachers about the ultimate goal of the entire educational program and to work diligently towards it. Teachers get to know their role explicitly in the curriculum through curriculum aims and work fervently and wholeheartedly towards achieving that. For example, The Pre-Tertiary Education Curriculum of Ghana aims at producing graduates who are problem solvers, critical thinkers (creative), confident and competent to show commitment as local and global citizens. Teachers are therefore challenged through this aim to nurture learners who will exhibit these virtues at the end of the educational programme.
- 7. The teacher is obliged to instill in learners the importance of making

responsible choices relating to the environment and climate. This responsibility of the teacher is defined solely in the curriculum.

Activity

- 1. Why do we have to encourage teacher to have knowledge in the Pre-Tertiary Education Curriculum (Ghanaian Basic School Curriculum)?
- 2. Discuss any four (4) relevance of the Pre-Tertiary Education Curriculum (Ghanaian basic school curriculum) to the basic school teacher.

UNIT 6

6.1 TYPES OF CURRICULUM

NTS 1c & 1f, p12; 2b, 2c & 2d p13; 3k p14.

Over the past decades many types of curriculum have been provided but because key players in education represent a diversity of values and experience, it is difficult to get wide public or professional consensus. Just as educators have defined curriculum in different ways and different forms because of their varied perceptions of what curriculum should be so are the types. There are different types of curriculum; official, formal, informal, hidden, null, actual, enacted, experienced, unintended, core, experience-oriented, subject-oriented, objective-based, standard-based, amongst others. However, for the purpose of this course two main types of curriculum shall be considered. These are

1) Objective-Based Curriculum; and

2) Standards-Based Curriculum.

6.2 Objective-based Curriculum (OBC)

Objectives are directions about what educators want the students to be able to do as a result of instruction. Objectives aid students, teachers, and parents by specifying the direction of the curriculum and goals. Objectives are therefore considered essential to goal setting and planning of curricula. Thus, in a whole, objectives help in ensuring that educational processes are aligned with instructional activities being directed towards the defined outcomes of learning.

This type of curriculum describes the end-points or desired outcomes of the curriculum, a unit, a lesson plan, or a learning activity. Objective-based curriculum (OBC) or objective-based education (OBE) is teaching and learning targeting outcomes of knowledge, competence and orientation (Brandt, 1992 as cited in Chan & Chan, 2009). They specify and describe curriculum outcomes in more specific terms than goals or aims. The immediate past pre-tertiary curriculum that phased out at the 2018/19 academic year in Ghana was an objective-based curriculum (designed to focus on knowledge) rather than measurable standards (emphasizing competency and driven by reasoning and application).

Why the past pre-tertiary education curriculum was objective-based:

- followed the objective-based curriculum design model and was officially defined by subject syllabi.
- 2) emphasized the use of official syllabuses, textbooks and teacher's handbooks, which were the only curriculum materials available to teachers and classroom activities were generally textbooks based, even though there were not enough

- textbooks for all school learners.
- 3) emphasised an activity-based approach which involved inquiry, creativity, manipulation, collaboration and social interaction but upon implementation, the learning and teaching activities in classrooms tended to favour an expository or didactic teaching approach which was largely teacher-centered.
- 4) Made provision for the use of Ghanaian languages as the medium of instruction for kindergarten and the first three years of primary school through which leaners were to learn the mechanics of reading and writing in their local Ghanaian language, as a necessary prerequisite for introducing learners to a foreign language.
- 5) made use of School-Based Assessment (SBA) with a focus on Class
 Assessment Tasks (CATs) as a replacement for continuous
 assessment in order to make assessment more comprehensive (i.e. to
 cover more applications and affective qualities).

6.2.1 The objective Model

The objective-based curriculum makes use of the objective model curriculum design that basically contains content that is based on specific objectives. The objectives specify expected learning outcomes in terms of specific measurable behaviour. This behaviour includes;

- a. Learning focuses on mastery of content
- b. The teacher is at the centre of the learning process
- c. Overdependence on textbooks, worksheet activities
- d. More concerned with preparation for next grade (or next test)

e. Less focused on understanding of concepts and mastery of skills by learners

The model is conceptualized in diagram 1

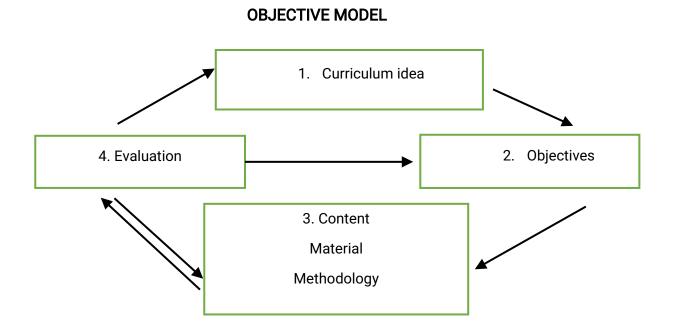


Diagram 1: the objective model

The model when explained clockwise implies that:

- 1) Curriculum organization begins with curriculum idea;
- 2) This is followed by formulation of objectives;
- 3) The next step is selection of content, material and methodology. However, content, material and methodology are derived from the objectives. Also, content here means subject matter and material stands for all the resources needed for effective implementation of the curriculum.
- 4) Then evaluation follows which is equally done at every stage of the curriculum.

There are both formative and summative evaluation (IEDE, 2014) It also implies that

The use of the objective model of the curriculum led to an over-emphasis on the products of learning; that is, knowing basic facts, principles, skills and procedures at the expense of the processes of learning which involve higher cognitive competences such as applying, thinking critically, creatively and practically; and the personal qualities and social skills necessary to become competent, engaging and contributing citizens.

6.2.2 Advantages of Objective Based Curriculum/Objective-Based Education (OBE)

- Learners know what is exactly expected of them as unit standards make it very clear what is required of them.
- 2. There is greater buy-in and support for OBE from all role-players due to the extensive level of consultation and stakeholder involvement.
- 3. Well-defined assessment criteria makes it clear to both assessors and learners how assessment will take place.
- 4. Assessment is more objective and fair as a result of pre-determined assessment criteria.
- OBE promotes the acquisition of the specific skills and competencies in a country in which there are many skill concepts.
- 6. OBE fosters a better integration between education at school, workplace, and higher education level.

- 7. OBE helps learners to accept responsibility for learning, as they are now at the center of the learning process.
- 8. OBE recognizes prior learning which prevents the duplication and repetition of previous learning situations (Sherill, 2017).

6.2.3 Disadvantages of Objective Based Curriculum

- 1. The shift to OBE has attracted lots of opposition. Opponents believed that, education should be an open ended and should not be constrained by outcomes and that education should be valued for its own sake, not because it leads to some outcome. They believe that defining education as a set of outcomes where teaching and learning is decided in advance conflicts with the wonderful, unpredictable voyages of exploration that characterize learning through discovery and inquiry. They mistakenly assume that teaching will be inappropriately limited by this model. Moreover they are arguing and emphasizing on what they believe; that the inclusion and emphasis on attitudes and values in stated outcomes is inappropriate (Eldeeb & Shatakumari, 2013; Harden, Crosby & Davis, 1999; Mckernan, 1993).
- Critics of OBE object to the use of standardized tests thinking that it is unfair to
 use the same level of work or to use the same achievement tests for
 impoverished or racially disadvantaged students as they do for more advantaged
 students.
- 3. They also claim that the OBE approach does not permit special, lower standards for students who have been badly served by public education in the past.
- 4. Regarding the outcomes, many opponents dislike them because they think

- the outcomes' standards maybe too easy, too hard, or wrongly conceived.
- In addition, some critics object to additional resources being spent on the struggling students.
- 6. Finally, some teachers find their grading workload significantly increasing in OBE curriculum (Mckernan, 1993; Eldeeb & Shatakumari, 2013)

6.3 Standard-Based Curriculum

To start with, 'standard' refers explicitly to specific knowledge, learning experiences to gain that knowledge, and assessments to check for mastery of that knowledge, developed by looking at the standards of a district, state, or nation. It is also a statement of what students should know and be able to do and demonstrate at the end of the process at each level. Standards can be used as reference point for planning, teaching and learning programmes and for assessing students' progress.

"A standards-based curriculum refers to a curriculum which has standards to be achieved across the educational system by identifying the knowledge, skills and dispositions that learners should know and be able to demonstrate" (The Pre-Tertiary Education Curriculum Framework, 2018; p.29). It also specifies activities leading to the attainment of specified standards. A Standards Based curriculum is a body of knowledge and set of competencies that form the basis for a quality education. It defines what students should know, understand and be able to do and includes the accompanying teaching content. In the same vein, standard-based curriculum has been defined as "a curriculum that is developed by looking at the standards (district, state or national); identifying the skills, knowledge and dispositions that students should

demonstrate to meet these standards; and identifying activities that will allow learners to reach the goals stated in the standards" (Lund & Tannehill, 2014, p.7).

A standards-based curriculum is designed using a Learning Outcomes. The Learning Outcome comprises a series of curriculum outcomes statements describing what knowledge, skills and attitudes learners are expected to demonstrate as a result of their cumulative learning experiences in school. Other terminologies used simultaneously to describe Standard include Learning outcomes, Learning objectives, Learning targets, or Competencies.

In education, the term standard-based refers to systems of instruction, assessment, grading and academic reporting that are based on students demonstrating understanding or mastery of the knowledge or skills they are expected to learn as they progress through their education.

Consequently, there are different types of standards that must be ensured in a standard-based curriculum. These include:

- Content Standards: These are statements about what learners should know and be able to do with the contents.
- 2) **Performance Standards**: These show how the learners have achieved the standard targeted. They show how learners are meeting the standard and their progress in meeting these standards.
- 3) Proficiency Standards: These indicate to us how the learners should perform.

The **standards-based curriculum** (SBC) or **the intended curriculum** is therefore the official or adopted curriculum contained in state or district policy. Standards-based curriculum (SBC) describes a body of content knowledge and competencies that students are expected to learn based on their participation within the school experience.

Thus the SBC includes broad descriptions of content areas and often specifies performance standards that students are expected to meet and is said to be the basis for quality education. State and district assessments are linked directly to the content and performance standards contained in the SBC. The SBC also outlines graduation requirements, which are taken from state department of education guidelines that specify the subjects and skills that should be taught at each grade level.

Standards-based curriculum helps teachers to link the taught curriculum to the required standards. It is the connection between the content standards and the taught and learned curriculum. The general goal of standards-based learning is to ensure that students are acquiring the knowledge and skills that are deemed to be essential to success in school, higher education, careers, and adult life.

6.3.1 Characteristics of Curriculum Standards

- a. They are connected to community needs and student needs.
- b. They empower teachers.
- c. They are based on principled procedures.
- d. They are flexible and able to change.
- e. They include timelines for students' learning, development and growth.
- f. They describe a whole curriculum.
- g. Hidden curriculum is considered.
- h. They identify big ideas, concepts and outcomes.
- i. They include assessment Formative, summative, diagnostic and generative.
- They include ways to satisfy accountability.

6.3.2 Characteristics of a standards-based classroom

- a. Classroom climate is characterised by respectful behaviours, routines and discourse;
- Classroom practices and instructions honour the diversity of interests, needs and strengths of all learners;
- c. The teacher ensures that all components of the lesson (e.g., learning activities, assessment, homework etc.) contribute to the lesson objectives and to the student mastery of the standard(s);
- d. Learning time is maximised for all learners;
- e. Instruction activates learners' prior knowledge and experience, and supplies background knowledge; and
- f. Learners respond to opportunities provided by the teacher to make connections between the lesson and personal experience (Adopted from M'barek El-farha oui).

6.4 Distinction between Objective-Based and Standards-Based Curriculum

- OBC focuses on what learners should know and little about what they should be able to do whereas in the SBC, emphasis is on what the learners should be able to do.
- 2) The content matter of the OBC is pre-determined and specific approaches to teaching are suggested. In the case of SBC, the content is flexible and encourages teachers to engage in innovative teaching to meet the unique needs of learners;
- 3) There is rigid prescriptions of textbooks that are aligned to the various subject syllabi in the OBC. On the other hand, the SBC does not necessary conform to the

- strict adherence to the behavioural view of learning.
- In OBC, learners are consumers of knowledge whereas in the SBC, learners are creators of knowledge.
- 5) In OBC, learning focuses on mastery of content whereas in the SBC, learners respond to opportunities provided by the teacher to make connections between the lesson and personal experience
- 6) In the OBC, the teacher is at the centre of the learning process whereas in the SBC, the learner are at the centre of the learning process leading to lifelong learning.

Activity

- 1. Identify any six (6) types of curriculum design.
- 2. Explain the following curriculum typologies:
 - a) Objective-based curriculum
 - b) Standard-based curriculum
- 3. Analyze any four (4) distinctions/differences between objective-based and standard-based curriculum.
- 4. Write any three (3) weaknesses and strengths of each of the aforementioned curriculum designs.

UNIT 7

CURRICULUM IMPLEMENTATION AND DELIVERY

7.1 Curriculum Implementation

According to Lewy as cited in Kankam-Boadu and Asare-Danso (2015: 109), "implementation means the open use of a programme throughout an entire school system". For instance, when the JHS programme started, schools were established in phases. The first set of schools were established in the regional capitals with the exception of one region in the 1975/76 academic year. More schools were added in the regional capitals and eventually in the 1987/88 academic year Junior Secondary Schools were established in all towns and villages in Ghana. It is at this stage that JSS curriculum can be said to have been implemented.

7.2 Processes Involved in/Stages of Curriculum Implementation

Kankam-Boadu and Asare-Danso (2015) have suggested some stages involved in curriculum implementation. These include:

- 1. Design: this is the first phase of the implementation process. The purpose is to ensure that the instructional programme designed meet the desired objectives (content standard and indicators). To ensure success at this stage, it is incumbent on the desiner to critically consider all the various elements of the curriculum i.e., the aims/goals/objectives, content, learning experiences as well as the resources available amongst others.
- Try-out: here according to Bloom as cited in Kankam-Boadu and Asare-Danso (2015), there are three major types of data that can be collected. These are:
 - a) Judgemental data: this involves the opinion of those who have used the instructional programme, for example, teachers, learners, supervisors,

- subject organisations etc.
- b) Observational data: these are data collected in the classroom on studentteacher interaction, methods of teaching among others.
- c) Student learning data: student learning data are collected during the various forms of assessment.
- 3. Field Trial: this is the phase where information about the new programme is gathered. The various sampling techniques are used in the collection of data. However, Bathory as cited in Kankam-Boadu and Asare-Danso (2015) stipulates that the respondents are basically students and teachers.
- 4. **Dissemination**: this stage is characterized by four components. These are:
 - a) Translocation: this requires the planning and movement of people and resources required to implement a new programme. It calls for an effective in-service training for teachers/facilitators whereas programme supervisors/authorities equally ensure that all necessary logistics/resources get to the schools.
 - b) Communication: this simpl;y involves the passage of information about the new programme form person to person (the general public/stakeholders). This can be achieved either through visits, media (radio, television, newpapers etc).
 - c) Animation: this is where motivation is provided for implementers of the programme who in most situations are teachers and learners.
 - d) Re-education: this requires an intimate relationship and constant interaction between teachers (implementers) and curriculum designers

(NaCCA) to ensure the former has in-depth understanding of the curriculum.

7.3 Implementation of a Standard-Based Curriculum

From the New Jersey Science Curriculum Framework as cited in the National Pre-Tertiary Education Curriculum Framework (2018), implementation of a standards-based curriculum can be achieved through the following steps:

- 1) Establish a coherent national philosophy to guide education;
- 2) Use evidence to guide research on learning and teaching;
- 3) Align the basic school curriculum by:
 - a. Identifying the standards in the current curriculum
 - b. Comparing established practices to the developed standards
 - c. Recognising curriculum deficiencies
- Use the curriculum framework as a model to develop activities related to content standards;
- 5) Implement the standards;
- 6) Align both teaching and assessment with the standards; and
- 7) Provide ongoing professional development.

Activity

- 1. What is curriculum implementation?
- 2. Identify five (5) steps involved in the implementation of standard-based

curriculum.

3. Outline any five (5) stages involved in objective-based curriculum implementation.

UNIT 8

THE BASIC CURRICULUM MATERIALS AND HOW THEY

ARE USED TO PROMOTE LEARNING

Curriculum materials are educational resources that provide curriculum and instructional experiences for students. These materials are used by educators to develop curricula and lesson plans and may also be used in actual instructional situations with students. Curriculum material is seen as the representational tools that teachers use to support and guide their teaching practice (NGSS Lead States, 2013). Curriculum materials include the following:

- a) Learners' textbooks
- b) teacher resource pack (teachers' guide)
- c) standard-based subject curriculum (teaching syllabus)
- d) multi-media and digital resources
- e) supplementary materials/readers
- f) basals
- g) learners' workbook

8.1 Definitions and Practical Considerations of Curriculum Materials

8.1.1 Textbooks

Textbooks are the material that indicates the learning experiences to be covered and the design of each lesson are carefully spelled out in detail. **Textbooks** provide organized units of work. A **textbook** gives you all the plans and lessons you need to cover a topic in some detail. A **textbook** series provides you with a balanced, chronological presentation of information. **Textbooks** are the most visible aspects of a curriculum and are often considered the main script that shapes the teaching and learning processes (UNESCO, 2017). Quality textbook development and provision involves four main steps: development (based on curricular frameworks); procurement systems (state or private sector, approved textbooks list); distribution and access (arrival in schools, issuance to students); and storage and conservation.

8.1.1.2 Factors to consider when using a textbook should include:

- 1. Use the textbook as a resource for students, but not the only resource.
- 2. Use a textbook as a guide, not a mandate, for instruction.
- 3. Be free to modify, change, eliminate, or add to the material in the textbook.
- Supplement the textbook with lots of outside readings.
- Supplement teacher information in the textbook with teacher resource books;
 attendance at local, regional, or national conferences; articles in professional periodicals; and conversations with experienced teachers.

8.1.1.3 Advantages of using textbook as curriculum material

- 1. Textbooks are especially helpful for beginning teachers. The material to be covered and the design of each lesson are carefully spelled out in detail.
- 2. Textbooks provide organized units of work. A textbook gives you all the plans and lessons you need to cover a topic in some detail.
- 3. A textbook series provides you with a balanced, chronological presentation of information.
- 4. Textbooks are a detailed sequence of teaching procedures that tell you what to do and when to do it. There are no surprises, everything is carefully spelled out.
- 5. Textbooks provide administrators and teachers with a complete program. The series is typically based on the latest research and teaching strategies.
- 6. Good textbooks are excellent teaching aids. They're a resource for both teachers and students.

8.1.1.4 Weakness

- The textbook is designed as the sole source of information.
- Textbook is old or outdated.
- Textbook questions tend to be low level or fact-based.
- Textbook doesn't take students' background knowledge into account.
- Reading level of the textbook is too difficult.
- The textbook has all the answer to all the questions.

8.1.1.5 Ways of Overcoming Problem of Textbook as Curriculum Material

- Provide students with lots of information sources such as trade books, CD-ROMS, websites, encyclopedias, etc.
- Use textbook sparingly or supplement with other materials.
- Ask higher-level questions and provide creative thinking and problem-solving activities.
- Discover what students know about a topic prior to teaching. Design the lesson based on that knowledge.
- Use lots of supplemental materials such as library books, Internet, CD-ROMs, etc.
- Involve students in problem-solving activities, higher-level thinking questions, and extending activities.

8.1.2 Teacher Resource Pack (Teachers' Guide)

Teachers' guides support teachers in their teaching practices. Effective teachers' guides is the book that contain explicit communication of conceptual goals with links to proposed activities, provide knowledge and support to help understand and implement teaching plans, reinforce pedagogical content knowledge, give guidance on the practice and understanding of relevant pedagogical activities, present alternatives and freedom of choice, and engage teachers in ongoing reflection.

Activity: guide students to discuss the usage, advantages and disadvantages of

teachers guide as a curriculum material

8.1.3 Supplementary Materials

Supplementary materials include books, newspapers, informational pamphlets, and other materials printed in mother tongue and instructional languages reflecting local customs and concerns. They enrich teaching, engage students in multi-dimensional learning, build students' abilities to apply their knowledge (Elliott and Corrie, 2015), and are thus critical for literacy outcomes (Read, 2015). Studies show that investments in reading books and school libraries have an even greater correlation with increases in student achievement in lower grades than investments in textbook provision (Read and Treffgarne, 2011; Read, 2015).

Activity: guide students to discuss the usage, advantages and disadvantages of supplementary materials as a curriculum material

8.1.4 Multimedia and Digital Resources

Multimedia and digital resources are a growing source of knowledge for teachers and learners. Several studies show that greater access to information and communication technologies in schools can help reduce the digital divide between low-and high-income groups (UNESCO, 2014a; Jacob, 2016). The digital era has challenged conventional textbook practices. Textbooks need updating more frequently and need to support collaborative and interactive pedagogical methods (Smart and Jagannathan,

2018).

E-learning and e-books E-learning is used as a general name for all ICT-enabled learning activities. The incorporation of e-learning activities in school systems drives teaching material requirements quite far from what is necessary when using traditional learning supports such as textbooks. It requires a functional infrastructure, including appropriate hardware and reliable, high-quality software. Advanced planning on the availability of significant ongoing technical support and reliable telecommunications connections is also required.

At the national decision-making level, equality implies that policies should specifically consider supporting small and rural schools in effectively adapting elearning and information literacy. Some learning opportunities enabled by the use of ICT include:

- a) Repetitive drills for developing low-level skills, with immediate feedback.
- b) Inclusion of pictures, audio and video-clips in school assignments.
- c) Ability to search for information using multimedia databases.
- d) Increased communication assignments using blogs, e-mail and chat interfaces.
- e) Programmed distance instruction using the web, after school hours.
- f) Use of games and other stimulators.
- g) Sensor-based applications for capturing data in experimental activities.
- h) Computerized assessment, virtual portfolios and online surveys.

8.2 Factors taken into consideration in the selection of curriculum materials

The following factors should be taken into consideration in the selection of printed textbooks, e-textbooks and other learning and teaching resources:

- a) providing a channel for knowledge acquisition and a framework for progressive construction of knowledge to help students make progress
- b) generating students' motivation to engage in learning, thereby enhancing learning effectiveness
- c) providing students with the opportunity to explore, discuss and coconstruct knowledge to nurture their critical thinking skills for making wise judgment
- d) complementing and extending what students have learnt in class to broaden their learning experiences
- e) providing learning activities at different levels of difficulty and a variety
 of learning experiences to cater for learner diversity
- f) developing students' positive values and attitudes as well as various generic skills and self-directed learning strategies
- g) using quality language and of reasonable price and weight

Using learning and teaching resources such as reference books, basals, multimedia resources and online teaching materials encourage learners to use information from different sources for research and study. This exposes that them to all kinds of text forms and multimodalities. They tend to understand and analyse issues in a more comprehensive way. Teachers can bring the real-

life issues to the classroom to enable learners apply what they have learnt in real -life situations.

8.3 Importance of Curriculum Materials

- Studies suggest that textbooks and similar materials (workbooks, exercise books)
 can increase student learning (Glewwe et al., 2011). This implies that there is
 improvement in students' performance with the availability of curriculum
 materials. For instance, textbooks are the most cost effective of all education
 inputs on student achievement (Read, 2015).
- Curriculum materials also provide well trained, prepared, supervised and motivated teachers.
- 3. Curriculum material improves teacher-learner interaction (World Bank, 2018a).
 For example textbooks to be effective, they must be regularly used in class, be in a language that is widely understood by both students and teachers.
- 4. Bias variables such as teacher qualification or school infrastructure that may influence educational outcomes are controlled by curriculum materials.

8.4 Challenges of Curriculum Materials

Many countries still face the challenges of insufficient availability, poor quality, and ineffective usage of curriculum materials (Elliot and Corrie, 2015). The challenges may also include:

8.4.1 Provision, cost, and accessibility

Accessibility is 'the extent to which an individual or group is able to acquire and use these tools, either freely or at an affordable cost' (UNESCO 2014b: 13). For instance adequate supply is considered a minimum of one textbook for three students, and, at primary level, enough reading books so that every child has access to at least one new book per week. Given that curriculum materials are often first to be hit by severe funding constraints, reducing their cost is key to improving their accessibility (Read and Treffgarne, 2011). With increased enrolment rates, curriculum materials provision systems are more expensive to maintain, and the high risk of corruption across the curriculum materials value chain may influence price.

8.4.2 Data and monitoring

Many countries do not have clearly defined, achievable curriculum materials provision targets, nor access to data that enable them to estimate curriculum materials supply and allocation to schools (Read, 2016). Private sector competition can lead to better production, higher quality, and reduced prices, but only if good management and monitoring processes exist within ministries of education (Read, 2015).

8.4.3 Quality and relevance

The physical characteristics of textbooks have a strong impact on their longevity and ultimately on their lifetime costs. The quality of layout, font, illustrations, and/or graphics, as well as the balance between visuals and text, also plays a key role in learning processes. For electronic media (e.g. audio, graphics, video, animation), quality

may be judged in terms of functionality as well as design, interactivity, and ease of navigation. For web resources, ease of access and navigation is important.

Curriculum materials should be a product of the curriculum development process and therefore aligned to the philosophy, objectives, content, methodology, and evaluation of the curriculum (UNESCO, 2005; Oates, 2014; Smart and Jagannathan, 2018). They should be age-appropriate and take into account different linguistic environments, local and indigenous knowledge, skills, and materials as well as the background and needs of learners (UNESCO, 2005; UNESCO, 2014b).

8.4.4 Equity and Inclusion

Quality textbooks should be free from divisive stereotypes and prejudices, frequently revised and updated to reflect changing local, national, regional, and international contexts (UNESCO, 2017). While CURRICULUM MATERIALS must adapt and respond to the diverse needs of all learners in a wide range of cultural contexts, economic conditions and educational settings', as well as personal situations (UNESCO, 2005: 3), they also need to represent this diversity in their content. However, some textbooks still present stereotypical, simplistic interpretations of gender and of ethnic, cultural, religious, and linguistic minorities (GEM Report, 2016b). The underrepresentation of people with disabilities in textbooks across the world perpetuates their invisibility and disadvantage.

Resources should be available in a language comprehensible to learners, in particular for 'low-achieving' students (Read, 2015). Textbooks should accommodate the special needs of learners with disabilities, through large font and Braille editions,

augmentative and alternative modes, and adapted versions at simpler levels of reading difficulty.

In crises and emergencies, textbooks need to respond to these particular contextual challenges as part of integrated, crisis-sensitive education content and planning approaches (Batton et al., 2015).

8.4.5 Policy and Planning

A textbook policy can help align the 'quality' components of education, curriculum, textbooks, and assessment systems with the learning process in the classroom. A textbook policy can also facilitate allocation of budgets between physical and digital materials and ensure coherence between curriculum, classroom practices, and learning objectives. The policy should set out the roles of the different actors involved in the process.

8.4.6 Provide capacity building

Capacity building may involve the training of textbook producers to create inclusive materials; support efforts of national and local publishing industries as providers of affordable textbooks and reading materials; training in content authoring and evaluation; and teacher training to develop and use textbooks and supplementary learning materials (UNESCO 2014b; UNESCO 2014c).

8.4.7 Decentralizing supply and distribution

Decentralizing from supply-side policies to demand-based school selection allows schools to select and order curriculum materials efficiently, and ensure ownership of the materials selected (Read and Treffgarne, 2011).

Investing in school and classroom storage and simple school management and usage systems, as well as opting for materials with high production specifications and a long book life, can help achieve maximum cost amortization and minimum distribution costs (Read, 2015). A shift from state- to private-sector authorship, publishing, production, and distribution in a public private partnership with government offers potential for better production and presentational quality as well as reduced prices of curriculum material.

Activity

- 1. What are basic curriculum materials?
- 2. List five (5) basic curriculum materials used in Ghanaian basic schools?
- 3. How can curriculum materials be used to promote learning in Ghanaian basic schools. Discuss any four (4) ways to achieve that.
- 4. Identify four (4) challenges confronting Ghanaian basic schools regarding issues of curriculum materials.
- 5. Mention five (5) factors you will consider when selecting basic curriculum materials for a basic school in Ghana.

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