Ministry of Education
Ghana

NATIONAL PRE-TERTIARY LEARNING ASSESSMENT FRAMEWORK

NATIONAL COUNCIL FOR CURRICULUM & ASSESSMENT OF MINISTRY OF EDUCATION

NaCCA

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Foreword

The introduction of the standards-based curriculum in the Pre-tertiary level of education has necessitated a shift in assessment practices and delivery in the country.

In view of the change in curriculum, the National Pre-tertiary Learning Assessment Framework (NPLAF) – has been developed. The NPLAF aligns with the National Pre-Tertiary Curriculum Framework, the new standards-based curriculum and supports their implementation. This document will serve as a storehouse policy of all principles, practice and conduct of assessments linked with learning at the pre-tertiary levels of education in Ghana. The focus is to provide everyone involved with assessment in Ghana (such as teachers, policy makers and parents), with a reference manual that clearly outlines how the curriculum standards – knowledge (and its use), skills and values will be assessed.

The NPLAF provides guidelines to stakeholders in terms of what assessment means (within the Ghanaian context), the purpose and uses of assessments, what to assess, how to assess, when to assess, who is assessed, who assesses, and other responsibilities associated with assessments including assessment resources.

The NPLAF covers learner assessment as well as the alignment between pedagogy and assessment. Thus, making it easier to measure the attainment of Ghanaian learners at various grade-levels against agreed standards and monitor their progress.

Additionally, it will improve the reliability, validity and fairness of teachers' assessment practices, whiles assuring accountability and public confidence in the assessment system. With such an assessment guide, teachers, parents and other stakeholders would better understand their roles in assessment and the teaching and learning process.

As learners move from one grade level to another, the NPLAF will help educators make informed decisions on their selection and placement into institutions and programmes. Alongside the revised School-Based Assessment (SBA) document, the NPLAF will help to monitor the progress of learners. It will guide the preparation and conduct of various school-level, district, national and international assessments and tests.

The Ministry of Education aims at developing empowered Ghanaian learners who are globally competitive in terms of their attitudes, skills, values and competencies.

Ultimately, the Ministry envisages that the Assessment Framework will support this course by providing consistent and reliable data for decision making at all levels of pre-tertiary education.

With the introduction of this policy document, I am fully confident that the quality of learning at the pre-tertiary level will be enhanced.

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Acronyms

4Rs	Reading, wRiting, aRithmetic and cReativity.
AaL	Assessment as Learning
AfL	Assessment for Learning
AoL	Assessment of Learning
BECE	Basic Education Certification Examinations
CAI	Cambridge Assessment International
CAT	Class Assessment Task
CC	Communication and Collaboration
CCE	Common Core Examinations
CG	Cultural Identity and Global Citizenship
CI	Creativity and Innovation
COHBS	Conference of Heads of Basic Schools
COTVET	Council for Technical and Vocational Education and Training
CP	Critical Thinking and Problem Solving
DFID	Department for International Development
DL	Digital Literacy
EGMA	Early Grade Mathematics Assessment
EGRA	Early Grade Reading Assessment
ETES	End-of-Term Exam Score
GATE	Ghana Association of Teachers of English
GES	Ghana Education Service
GNAT	Ghana National Association of Teachers
IAS	Internal Assessment Score
INSETs	In-Service Training
KG	Kindergarten
MAG	Mathematical Association of Ghana
MoE	Ministry of Education
NaCCA	National Council for Curriculum and Assessment
NEA	National Education Assessment
NIB	National Inspectorate Board
NPECF	Pre-tertiary Education Curriculum Framework
NPLAF	National Pre-tertiary Learning Assessment Framework
NTC	National Teaching Council

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PIRLS	Progress in International Reading Literacy Study
PISA	Programme for International Student Assessment
PL	Personal Development and Leadership
PLC	Professional Learning Communities
PSC	Public Services Commission
SBA	School-Based Assessment
SDG	Sustainable Development Goal
SEA	School Education Assessment
SHS	Senior High School
SISO	School Improvement Support Officers
SPAM	School Performance Appraisal Meeting
TIMSS	Trends in International Mathematics and Science Study
TVET	Technical and Vocational Education and Training
UCC	University of Cape Coast
UEW	University of Education, Winneba
UG-Legon	University of Ghana-Legon
WAEC	West African Examinations Council
WASSCE	West African Senior Secondary Certificate Examination
WEL	Workplace Experience Learning

1.0 Introduction

This document is the National Pre-tertiary Learning Assessment Framework (NPLAF), which is a storehouse policy document of all principles, practice and conduct of assessments associated with learning at the pre-tertiary levels of education in Ghana. The NPLAF proffers a basic structure that underly learning assessments in terms of what assessment means (within the Ghanaian context), the purpose and use of assessments, what we assess, how we assess, when we assess, who is assessed, who assesses, and other responsibilities and generic functionalities associated with assessments including assessment resources. Broadly, the NPLAF covers learner assessment, teacher appraisal, school evaluation, school leader appraisal and education system evaluation, as well as the alignment between the different components.

This Assessment Framework helps to support SDG4 and the Education 2030 Framework for Action. It is also in line with Ghana's Education Strategic Plan 2018-2030, which prioritises improving learning outcomes at all levels. The current national pre-tertiary education curriculum is a paradigm shift from an objective-based curriculum to a standards-based curriculum, which is in line with global curriculum reform trends. It provides quality education that develops the knowledge, understanding and skills learners need for successful transition into tertiary education and the workplace. Achievement of the curriculum content standards develops learners who:

- communicate confidently in spoken and written language
- solve problems effectively by applying their knowledge and understanding to new and unfamiliar challenges
- think creatively and explore different perspectives
- value the history and traditions of their family, community and nation
- take responsibility and participate fully in society as local and global citizens
- are empowered to contribute to the digital world and think critically about the information they find online
- actively engage in life-long learning
- apply mathematical principles, concepts and methods in everyday life
- understand scientific concepts and their relevance to the natural and man-made worlds.

In line with the new paradigm, assessment reforms within the learning philosophy of the curriculum are an essential requirement. This means that an assessment framework

has become necessary to align and walk the imperatives of the standards-based curriculum through steps that ensure that they have been achieved. In other words, the National Pre-tertiary Learning Assessment Framework has been developed to support the implementation of the Curriculum Framework

As practitioners and stakeholders, it is important to remember that the essence of the national pre-tertiary curriculum is to nurture a Ghanaian child who is independent in thought, is a team leader, patriotic, digitally literate, a good communicator, team player, problem-solver, critical thinker, innovative, creative, has good morals, and above all is a global citizen. This framework should therefore be used together with the National Pre-tertiary Education Curriculum Framework (NPECF) and the curriculums of the respective subjects to ensure a strong synergy in the implementation of the curriculum standards and assessment strategies.

The subject curricula cover the indicators identified in standards, and learner assessments focus on attainment of the standards. Assessments shall be used to drive the curriculum by creating assessment tasks based on the curriculum standards. In doing so, learners' status and progress on the standards can be determined and this is used to inform instruction. If assessments do match the curriculum standards, then their results have greater value in judging how well students are learning.

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2.0 Why have an Assessment Framework?

This Assessment Framework is designed to enable the government of Ghana and other educational authorities to support teaching and learning in schools in Ghana. The focus of this document is to provide everyone involved with assessment in Ghana(such as teachers, policy makers and parents), with a reference manual that clearly outlines how the curriculum standards – knowledge (and its use), skills and values– that are central to the new pre-tertiary education curriculum will be assessed.

This Assessment Framework will:

- Provide an overarching set of principles that guide the design and operation of assessments at the pre-tertiary level;

- Promote alignment between the pre-tertiary education curriculum, pedagogy and assessment; and

- Provide a framework within which classroom practitioners and policy makers can operate.

This will make it easier to measure the attainments of learners at various grade-levels against agreed standardsand monitor their progress as well. Additionally, it will improve the reliability, validity and fairness of teachers' assessment practices, whiles assuring accountability and public confidence in the assessment system. With such an assessment guide, teachers, parents and other stakeholders would better understand their roles in assessment and the teaching and learning process.

It is expected that the Assessment Framework will support the provision of consistent data for decision making at all levels of pre-tertiary education. Using data for system monitoring is important for understanding how the education system is performing.

Arguably, it is impossible to know whether an education system is succeeding in providing quality education in the absence of data on how learners are performing.,

In sum, the Assessment Framework seeks to support teachers in developing empowered Ghanaian learners who are globally competitive in terms of their attitudes, skills, values and competences.

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3.0 Why do we assess?

3.1 Reasons for assessing

Assessment is done to gather data on learning, teaching, schools and the education system to enable decision making- reflection and evaluation-on the progress attained by learners. Some of the reasons for conducting assessment in Ghana include the following:

- **Learner assessment**: To ascertain the level of learners' performance against curriculum standards and core competences in order to make decisions regarding selection, remediation, promotion, certification, proficiency and competency.

- **Teacher appraisal:** To improve the teacher's own practice by identifying gaps in the content delivery and pedagogy. Effective content delivery and sound pedagogical practice,such as the play-based approach at the KG level, will have impact on learning outcomes. Such appraisal will enable teachers to identify and address weaknesses through professional development sessions (e.g. school-based Professional Learning Communities (PLCs)), and help them to meet agreed targets (see Figure 1for the agreed targets).Teacher appraisals will include teacher's personal self-appraisal (through reflective practices), supervisions from external bodies (e.g., NIB, NTC, GES) towards their professional development, as well as using appraisal tools (e.g., lessons, observations and the Public Services Commission(PSC)staff appraisal forms). There are protocols available in the learning plan (i.e. lesson plan) format for self-reflection by the teacher.

- **School evaluation**: To obtain credible information about schools in terms of learners and teachers' performances, leadership, resource availability and infrastructure. This information is provided to stakeholders, particularly parents, to know how well a school is performing. This data may also be useful to teachers and school leaders looking to share best practices. School evaluation is done at the district and national levels by the National Inspectorate Board (NIB), who will in turn disseminate the results through various communication outlets such as its website platform, School Performance Appraisal Meetings (SPAM) at the community level, and policy dialogues. The National Council for Curriculum and Assessment (NaCCA) plays a key role in school evaluations.

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- **System evaluation:** To determine the strengths and weaknesses of the entire pre-tertiary educational system and permit a good understanding of how well learning is being facilitated. This will provide the government with robust data on performance, effectiveness of programmes, policies, monitoring and supervision, and also help identify priority areas for planning, intervention and policy direction.

3.2 Assessment purposes

There are many different reasons why assessment takes place. For example, if a teacher conducts formative assessment in the classroom, they can provide feedback that will help learners to know where they are in terms of meeting the expected learning outcomes. Additionally, it will allow teachers identify and respond to the unique needs of different developmental domains[1] of learners. It is important to ensure that people who develop assessments, such as teachers and the West African Examinations Council (WAEC), clearly understand the main purpose (and any other purposes) of the assessment when designing it, to ensure that the assessment strategy employed is appropriate for its intended purpose.[2]

This section provides an overview of the different purposes of assessment.

3.2.1 Diagnostic Assessment

Diagnostic assessment is conducted before any learning episode (interaction). It is used to identify learners' learning needs, their current knowledge, skills and strengths, in order to inform appropriate interventions and/or remediation. It enables the teacher to identify areas that are difficult for learners and informs development of teaching and learning strategies.

3.2.2 Formative Assessment

This normally occurs during learning interaction. It enables monitoring of learners' progress and provides feedback to guide lesson planning and delivery. Formative assessment involves the use of various instruments such as rubrics that can help clarify and support learning and assessment objectives. Examples of formative assessment include *assessment for learning* and *assessment as learning.*

- **Assessment for Learning (AfL)** Assessment for Learning is the process of seeking and interpreting evidence for use by learners and their teachers, to

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1   Literacy-numeracy, social-emotional, cognitive/learning, physical domains
2   For a discussion of assessment purposes, see Newton(2007).

ascertain where the learner is in their learning, where they need to be (the desired goal), and how best to get there. AfL is one of the powerful methods for improving learning and raising standards (Black and Wiliam, 1998).

AfL also refers to 'all those activities undertaken by teachers and/or by their learners, which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged' (Black and Wiliam, 1998). AfL can be achieved through processes such as sharing criteria with learners, effective questioning, and feedback.

- **Assessment as Learning (AaL)** Assessment as Learning develops and supports learners' sense of ownership and efficacy about their learning through reflective practices. This form of self-assessment (or peer-assessment) helps in building the competences of learners to achieve a deeper understanding of what is taught and what they learn on their own. It also enables teachers to assess the methods used for teaching so that they can make relevant adjustments to support learners' remediation.

At the kindergarten level, learners should be supported by their teachers to appreciate and use appropriate learning tools specific for KG,through play-based learning, to determine their readiness[3] for transitioning to the next level.

3.2.3 Summative Assessment

This is done to find out how much learners know and can do, to inform decisions on promotion, selection, grading, certification and accountability. It provides information that sums up the teaching and learning process to compare learners' achievement with standards. Summative assessment is mainly assessment of learning, which is described below:

- **Assessment of Learning (AoL)** Assessment of Learning is done to provide feedback on what has been achieved at the end of each stage in the learning process. Through AoL, stakeholders such as parents are informed about the extent of achievement learners have attained with respect to the expected learning outcomes, at the end of their grade or programme. This information provides data for accountability and educational decisions such as readiness, grading, selection, placement, promotion and certification.

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3   School readiness facilitates abilities such as assertiveness, good interaction, inquisitiveness, participation in activities, etc.

3.2.4 Evaluative Assessment

This is done to make value judgement about the worth of a product, instructional materials, instructional procedures, curricula or an educational programme. It is also used to draw conclusions about the performance of a programme or system. Data on programme evaluation, institutional monitoring, resource allocation and organisational interventions will help improve upon the learning process.

Summative
- Certification
- Promotional /transfer
- Choice of school
- Reporting learner progress to stakeholders
- Placement
- Selection
- Resource allocation
- Organisational intervention
- System monitoring

Formative
- Providing feedback to learner
- Providing feedback to teacher
- Guiding remediation
- Monitoring learner's progress

Purpose of Assessment

Diagnostic
- Providing information to learner
- Providing information to teacher
- Promoting communication between teacher and learner
- Guiding remediation
- Providing information to policy maker

Evaluative
- Programme evaluation
- Institutional monitoring
- Resource allocation
- Organisational

Figure 1: Assessment Purpose at a glance

4.0 What do we assess?

The Pre-Tertiary Assessment Framework has been designed to assess the Core Competences, 4Rs, Practical Skills and Values and Attitudes outlined in the Curriculum Framework. It is envisaged that the core competences will be assessed explicitly and assessments will focus on skills, knowledge and values simultaneously, which altogether should culminate into quality education that we desire. In this manner, assessment tasks or activities shall endeavour to develop the cognitive capacity (knowledge, understanding, application and reasoning) of learners, and nurture positive values and attitudes, with a strong emphasis on the 4Rs (Reading, wRiting, aRithmetic and cReativity).

The conceptual map provided in Figure 2 illustrates the approach to assessment.
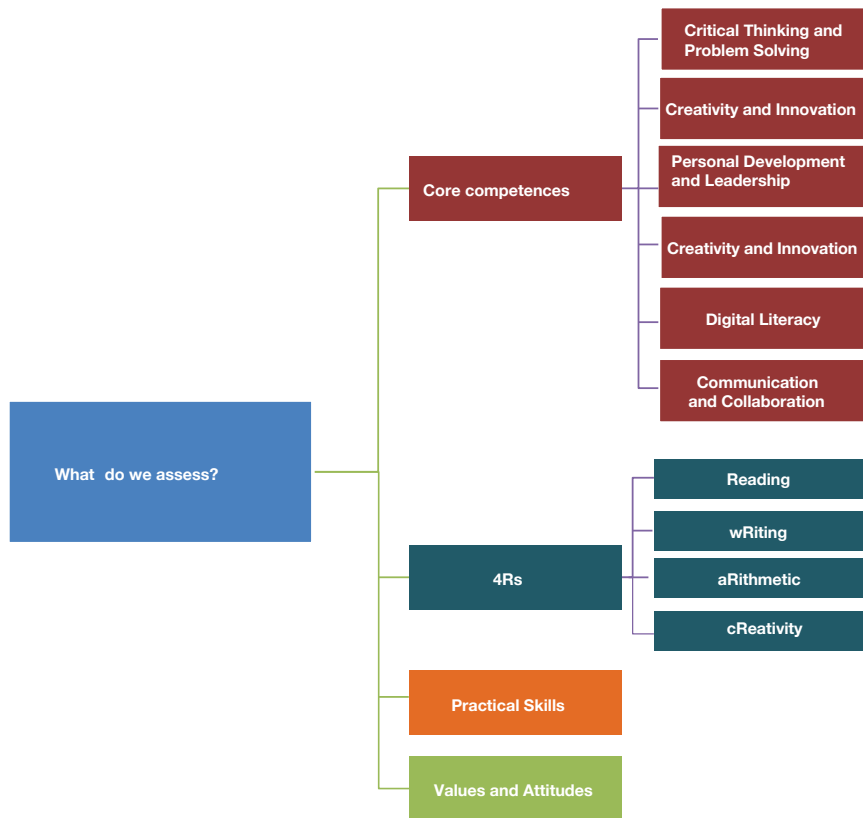
Figure 2: Conceptual map showing how knowledge, practical skills, values and attitudes are assessed

4.1 The core competences

The Curriculum Framework identifies six core competences and these have been used to guide the development of the Assessment Framework. The six competences are:

- Critical thinking and problem solving
- Creativity and innovation
- Communication and collaboration
- Cultural identity and global citizenship
- Personal development and leadership
- Digital literacy.

These competences underpin the knowledge and skills that learners are expected to develop through the pre-tertiary curriculum. Teachers will familiarise learners with the competences as part of their regular classroom practice. Details of how the competences will be assessed at each Grade are provided in Section 7 of this document. Additionally, teachers (assessors) will use carefully designed rubrics developed by NaCCA to assess and report on these core competences.

However, some general guidance about how these competences can be assessed are described in this section.

i) *Assessing critical thinking and problem solving would require, among others, the following:*

- Coursework (practical and hands-on activities)
- Use of a range of question types focused on specific themes
- Use of analysis and argumentation learning
- Use of realistic scenarios and case studies
- Identification of desired qualities the learners are expected to demonstrate in order to facilitate their use of these values in context
- Research and project works.

ii) *Assessing Creativity and Innovation would require, among others, the following:*

- Use of individual and group projects.
- Bringing school and local community problems to learners' attention for discussion and action.

- Showing evidence of creativity and innovation by coming up with new ideas and creating products that solve a given, real world problem.

iii) *Assessing Communication and Collaboration would require, among others, the following:*

- Creating scenarios that enable learners identify what they can do, and communicate with others in response to a problem or issue through for example, role play, debate, drama or reflective dialogue.

iv) *Assessing Cultural identity and global citizenship:*

- The assessment processes require teachers to create activities that would make learners aware of their culture. The activities should also guide learners to relate their belief systems within a global context.

- Learners should be assessed to demonstrate skills that show how they are able to apply global best practices in their local context.

v) *Assessing Personal development and leadership:*

- Learners are assessed on how to demonstrate self-esteem, self-awareness and on values that would make them show self-confidence in different situations.

- Assessment should enable learners apply self-knowledge under conditions that would demonstrate leadership as required of them.

vi) *Assessing Digital Literacy:*

- Digital literacy assessment requires learners to exhibit practical skills in digital communication (including but not limited to word processing, use of social media, collaborative use of search engines, etc.).

- Learners will evidence their understanding of the risks and dangers in the use of the Internet and technology, as well as how to avert or mitigate these risks and threats.

Each of the six core competences comprises a combination of skills, attitudes and values, as shown table 1 below:

Table 1: The six core competences and what they encompass

CORE COMPETENCES	SKILLS	ATTITUDES	VALUES
Critical Thinking and Problem Solving (CP)	✓	✓	
Creativity and Innovation (CI)	✓	✓	
Communication and Collaboration (CC)	✓	✓	
Cultural Identity and Global Citizenship (CG)	✓	✓	✓
Personal Development and Leadership (PL)	✓	✓	✓
Digital Literacy (DL)	✓	✓	✓

vii) *Assessing the developmental process and school readiness. This form of assessment would require learners to:*

- Recite or sing the alphabet, scribbling, interact with books.

- Tell picture stories in sequence; pronounce sounds, reads two/three letter words.

- Group objects and recognise given patterns (counting/matching numerals with objects)

- Dress up with minimal assistance, identify and name body parts, animals/objects in the environment.

- Use simple expressions of courtesy (e.g. greetings), obey rules, tell roles of family members, etc

- Communicate needs to peers/adults, share with peers, show persistence in completing tasks.

- Compare height/lengths of objects, appreciate the use of collectibles for playing games.

- Climb and descend stairs, dance to rhythm, fasten buttons and zip up clothing.

4.2 The Four Rs

In addition to assessing core competences, the new curriculum focuses strongly on the 4Rs. It is hoped that all learners in Ghana will become proficient in Reading, wRiting, aRithmetic and cReativity.

The assessment of the 4Rs in each Grade and Key Phase aims at ensuring that there are linkages in the understanding and application of the 4Rs across the core subjects. Assessment should take account of how the 4Rs apply in each of the core subjects. It is important that teachers demonstrate these linkages in the delivery of content in each subject.

5.0 How do we assess?

5.1 Assessment practices in schools (School-level assessment)

5.1.1 School Based Assessments (SBAs)

School Based Assessment is central to the conduct of assessment in schools. It is a system of using different test modes: class tests, class exercises, groupworks, portfolio, rubric, homework, projects and other assessment procedures to measure what learners have achieved through a teaching/learning process. Broadly, the SBA is simply all forms/modes of assessment that can be undertaken internally by any school-level actor (learner, teacher, headteacher).This means that SBA include diagnostic assessments, formative assessments and summative assessments that can be completed while at the school.

However, for the purpose of describing the overall learner achievement at the end of a term/grade-level or programme,an **Internal Assessment Score** (**IAS**) and an **End-of-Term Exam Score** (**ETES**) shall be generated and put together (i.e. added). The **Internal Assessment Score (IAS)**will involve a resultant score of four (4) different assessments completed at distinct times in a term. Table 2(see page 12) shows these assessments and when they are to be completed during the course of a term. The IAS will contribute 30% to the process of describing learner achievement, whilst the remaining 70% will be contributed by the End-of-Term Exams or any other external (national level) exams.

It gives the schools the chance to ensure that all aspects of the education and training are considered in the assessment of the performance of learners while in school. Through SBA, the teacher is also involved in the final grading of the learner. Details of using the SBA,such as grading and reporting,have been provided in the revised *SBA Document*. The revised SBA document is available on NaCCA's website for teachers and all stakeholders. NaCCA is responsible for providing guidance and support on SBA, whereas the training of teachers on effective use of the SBA is the responsibility of GES.

Why SBA?

The objectives of the school-based assessment are to:

- obtain a better picture of the learner performance across an entire programme or course than that provided by a single-shot examination

- add the wide-ranging observations of classroom performance over many years to the single-shot exams used by external examination bodies (e.g. West African Examinations Council (WAEC) in learner assessment.

- enable holistic assessment of the learner

- emphasise learner-centred approach to learning

- standardise internal assessment practices across schools

- assess the core competences which otherwise cannot be assessed by NSAT

- guide improvement of instruction and learning in schools

- allow for teachers to develop assessments around challenging areas of the curriculum

- collect information about learners that will be helpful in planning instruction to meet their most critical learning needs.

- assess whether the instruction provided is enough to help learners achieve the curriculum standards

- encourage more individualised instruction

- identify students who may be "at risk" or who may need extra instruction or intensive interventions if they are to move toward grade-level standards

- monitor all learners' progress to determine whether "at risk" students are making adequate progress, and to identify any learner who may be falling behind.

- introduce a system of moderation (See the revised SBA Document) that will ensure accuracy and reliability of teachers' marks.

- provides teachers with advice on how to conduct remedial instruction on difficult areas of the curriculum to improve class performance.

Uses of SBA

Among other things, the SBA will be used for the following:

- help learners reflect upon their own learning and progress

- help learners understand and appreciate their strengths, abilities and areas for development.

- help prevent underachievement

- improve motivation and self-esteem

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- activate learners as instructional resources for one another
- promote teamwork and collaboration
- fosters cooperation between the teacher and the learner especially in the area of learners' class projects
- allow for the holistic approach to assessing learners

Modes of SBA

SBA emphasises a learner-centred approach to learning and seeks to develop high ability thinking skills, problem solving skills, cooperative learning, teamwork, moral and spiritual development and formal presentation skills on the part of the learner. It consists of 12 assessments a year. The 12 assessments are labelled as *CAT 1*, *CAT 2* up to *CAT 12*. The class assessment task (CAT) 1-4 will be administered in Term 1, CAT 5-8 will be administered in Term 2 and CAT 9-12 in Term 3.

CAT1 will be administered as group exercise coming at the end of week 4 of Term1. When administered in Terms 2 and 3, the equivalent of CAT 1 will be CAT 5 and CAT 9 respectively.

CAT 2 will be administered as class test coming at the end of week 8 of Term 1. When administered in Terms 2 and 3, the equivalent of CAT 2 is CAT 6 and 10 respectively.

CAT3 will also be administered as group exercise coming at the end of the 11th or 12th week of the term. When administered in Terms 2 and 3, the equivalent of CAT 3 is CAT 7 and CAT 11 respectively.

CAT 4, 8 and 12 are projects. These are tasks assigned to learners individually or in groups to complete over an extended period of time. It may include practical work and investigative study (including case study) and survey. A report will be presented for each project undertaken.

Table 2: Summary of SBA modes for Term 1

Class Assessment Task (CAT)	Modes	Weeks of the Term													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Group Work				▓										
2.	Class Test								▓						
3.	Group Work											▓			
4.	Project		▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓		

Table 3: Summary of SBA modes for Terms 1 - 3

Class Assessment Task (CAT)			Modes	Weeks of the Term													
				1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	5.	9.	Group Work				▨										
2.	6.	10.	Class Test								▨						
3.	7.	11.	Group Work											▨			
4.	8.	12.	Project		▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨		

Successful SBA takes into account six principles of best practice:

Principle 1: Emphasis must be placed on assessment for learning and assessment as learning. There should be a monitoring and evaluation plan or framework.

Principle 2: School Improvement and Support Officers (SISO) within the MMDA, headteachers and teachers should be given support in terms of competency training workshops and PLC training sessions.

Principle 3: Data utilisation must be a priority, in order to inform teachers and other key stakeholders on current learning progressions in various schools across the country.

Principle 4: Technology should be utilised as far as possible in implementing SBA.

Principle 5: Per the new standards-based curriculum, project topics should be developed from the different subject curricula, specifically from indicators which actually demand project. Projects should be flexible in executing (see Section 5.1.1.4). The teacher should also give learners the opportunity to sometimes come up with their own project topics that should be aimed at solving problems that affect them, and by so doing learners find solutions to their problems in real time.

Principle 6: Authentic classroom assessment should be incorporated as part of SBA (see Section5.1.1.3).

5.1.1.1 Classroom assessment under SBA (e.g. tasks, projects, tests, observations, etc.)

In order to capture the full range and levels of competences, a variety of formal and informal assessment situations are necessary to provide a complete picture of the learner's progress and achievements in all subjects. Classroom assessment

must be clear, simple and manageable, and explicitly anchored in learner-centred principles and practice.

Teachers must elicit reliable and valid information of the learner's performance in the basic competences. The information gathered about the learners' progress and achievements should be used to give feedback to the learners about their strong and weak points, where they are doing well and why, and where they need to improve, how, and why.

Parents should be regularly informed about the progress of their child in all subjects, be encouraged to reward achievements, and given suggestions on how they can support their children's learning activities. Guidance on classroom assessment is incorporated in the revised SBA showing how teachers will go about planning and delivering this form of assessment. NaCCA is responsible for leading processes to providing support to the teachers to develop and use internal assessment, whereas the GES implements training programmes for the teachers on classroom assessments.

At the Kindergarten level

Assessment can be done during whole class circle times, at discussions or during small group activities, or in free choice activities inside or outside the classroom. It is important that the teacher is very familiar with the assessments required as several different skills can often be observed during one activity. For example, learners may be making a linear pattern by threading beads to match a pattern *re/ref/blue/red/red/blue*. Child A begins with a *red* bead then says, 'I need a blue bead',Child B says, 'No you need one more *red* one'. The teacher has observed that Child B can name and identify *red*, can follow a pattern, understands 'one more' and is able to help another pupil.

The teachers should record exactly what the learner said in a notebook as soon as possible after the event. At the end of day, the teacher should take the 'Pupil Achievement Record' for each of the children observed that day and tick the skills that the learner performed.

The learner should show the skill on three separate occasions before the teacher can be sure the skill has been mastered.

Table 4: Summary of SBA (Learners Progress) for Term 1-3

Literacy/ Numeracy	Modes	Example					
		Language and Literacy<?>	MO	O	S	NA	Comments
1.	Observation						
2.	Rubrics/Checklist						
3.	Group Work						
4.	Anecdotal record						
5.	Rating Scale						

5.1.1.2 Using Play-Based Approach under SBA

Creating opportunities and environments that promote play, exploration and hands-on learning are critical and useful for School Based Assessment. At the KG level, assessment can be done through active learning when the learner is placed at the centre of their learning process. It offers opportunities to assess the early learning skills, knowledge and understanding that form a firm foundation of learners' later learning. Thus, assessment through observation must be an ongoing process throughout the school-year to ensure that there is early identification and diagnosis of learners' achievements, development and learning needs. This can be done through small groups or individually at teachers' own discretion. For example assessment through observation is one of the most important ways in which notes on learners who gain essential knowledge and skills relevant to their future, such as social skills (communication, collaboration, etc.), critical thinking and creativity can be captured and used as a basis for learners' progressive support.

5.1.1.3 Making assessment authentic under SBA

Authentic Assessment (AA) requires learners to use higher-level thinking to focus on key educational outcomes, such as project work to develop a product, service or solution in response to a societal problem. This approach to assessment includes projects and other modes of assessment such as practicals and peer assessment. AA tends to be realistic and focuses on real-life situations. Through project work, AA teaches skills that help learners to further understand course content and may also have wider applications.

One example of a project completed by SHS learners used scientific skills to produce soap that could be used by the school, marketed and sold to develop entrepreneurial

skills. Learners are motivated to understand science as a method for eradicating poverty in line with the Sustainable Development Goals (SDG 4). For AA to be successful, the project needs to be structured; i.e. allowing specific time for its accomplishment and being led by a champion (e.g. a teacher). When successfully done, AA fulfils the six competences of the new curriculum framework. In order to ensure that assessment of the key competences are embedded in the project work, the various core competencies used in the project work should be identified and assessed implicitly within the context used in the work. For example, in order to verify that a learner has applied the critical thinking and problem-solving competency, it is necessary to ensure that the learner's analysis and argumentation reflect their understanding of the relevant values used in the project work.

5.1.1.4 Project-based Assessment under SBA

Project work is conducted as part of SBA but it can also be used in the classroom as part of, for example, peer assessment activities. Projects are learning activities that provide learners with the opportunity to synthesise and apply knowledge in a real-life situation. Projects shall suggest learning situation that enables the learner to demonstrate their capabilities whilst working independently or in a group. Projects open up new ways of learning through discovery by learners. A well-run project teaches learners how to plan carefully, use their initiative, take on responsibility and present results skilfully. Projects bring out the innate and creative abilities of learners, allowing them to delve into content in a more direct and meaningful way, as well as create bridges/promote links among subject matter of different disciplines in a way that helps them view knowledge holistically, rather than from a narrow point of view, or as isolated facts.

Projects help learners develop skills for living in a knowledge-based, highly technological society and teach them to take control of their learning. It helps learners learn to learn, plan, think critically and become creative. Projects will develop the learner's ability to work with his or her peers, build teamwork and group skills.

Projects are normally geared at solving problems in the classroom, school, community and the world at large. They foster learners' inventive and creative skills, their ability to think critically and to work with others to solve real life problems. Whilst engaged in project activities, learners have fun constructing knowledge in a creative way.

The teacher acts as a coach or a facilitator directing learners' activities and ambitions. Performance is assessed on an individual basis and takes into account the quality of the product produced, the depth of content understanding demonstrated, and the contributions made to the ongoing process of project realisation.

The use of project work in assessment will ensure the following:

- Provide the opportunity to assess the core competences and values.

- Put learners in a position to make use of the knowledge they have acquired.

- Foster understanding, motivation and engagement to learn (i.e., curiosity) and retention in learners.

- Improve learners' information searching and enquiry.

- Nurture values such as investigative, creativity, analytics, critical thinking, communication, collaboration, time management, reflection, leadership, self-assessment as well as independent learning.

- Ownership of knowledge and idea through the learner's ability to defend what they produce.

- Creation of society-relevant inventions, products and academic writings.

What do we assess in project works?

In project works, a strong focus is placed on learners' ability to apply knowledge and demonstrate competences to solve problems. This provides the opportunity to assess whether learners have developed the required knowledge and skills for school and their future careers.

What form can projects take?

Project work can be in any of the following forms:

- *Experiments*: This will require the teacher to give learners a task that involves carrying out a test trial or a tentative procedure. It is an act or operation for the purpose of discovering something unknown or of testing a principle. During experiments, learners observe, record, analyse and evaluate their results. In this, emphasis is placed on learners being able to repeat the experiment to be able to draw valid conclusions.

- *Investigations*: Investigative projects enable learners to create their own questions around a topic, collect, organise, and evaluate data, draw conclusions and share results through presentations and explanations. Learners may demonstrate the results of their investigations through different types of products and experiences, including the writing of a paper, the development of artwork, oral presentations, audio and videotape productions, photographic essays, simulations, or plays.

An investigation can also be in the form of:

- Design projects
- Argumentation projects
- Decision making Projects
- *Material production projects*: These provide learners with the opportunity of applying knowledge gained in class to create items, objects or crafts that are beneficial to themselves, their communities, schools and/or the outside world. This can be in the form of projects which lead to personal improvement, community involvement, and service.

Note: *The design projects* can be in the form of human-centred projects that require learners to 'think, pair and share' ideas to design a solution to solve a friend's problem. It can also be in the form of a design for a specific invention to solve a problem.

Choosing the Project

The following guidelines are to be followed in selecting a project topic for learners:

- Project topics should focus on solving problems in learners' schools, communities, Ghana and the wider world.
- Projects should provide a simple way of engaging learners with real-life problems or questions.
- The resources to be used for the project must be cost effective and readily available in the learner's community.
- The project should foster play-based activities such as role-play.
- The design of project topics should be guided by school and regional demographics and resources.
- The project must be embedded in authentic assessment strategies.
- It should be an activity that fosters creativity, originality and innovation amongst learners.

The broad topic that the project is based on may be identified centrally by NaCCA in collaboration with the Ghana Education Service, distributed to schools and then be reviewed every three years.

How do we assess projects?

A scoring rubric, usually in the form of a table, is used to evaluate the project work. In assessing the project, the following stages of the project's development must be considered:

- *Preparation*: This involves the initial decisions and actions taken by the group of learners on how to go about to complete the project. It may cover things such as the topic or title of the project, resources to be used, designation of roles and timelines for completion.

- *The Process*: This aspect focuses on all the activities that the learner or group of learners embark upon from the start to the completion stage of the project. In allotting marks at this stage, the teacher must look at the level of participation of each learner, the step-by-step procedure and the way and manner that different materials and resources are utilised. Observation of health and safety rules is paramount in ensuring that projects works are carried out successfully.

- *Product*: In scoring the project, teachers must ensure that the final work is neat, clear, complete, creative and appealing. Teachers must also look out for the extent to which the final product aligns with the purpose of the project.

- *Response/Evaluation***:** This focuses on how learners are able to explain their final product in terms of the processes involved in its production as well as the advantages. At this stage, the teacher assesses the ability of learners to defend their work and the extent to which the work answers the purpose or goal of the project

Other key considerations may include:

- originality of the project;

- level of creativity and innovation;

- simplicity and cost effectiveness of the project;

- the extent to which it fosters learner development and other core competences; and

- the extent to which the final product can be used in real-life situation or to address a challenge.

A project may thus be assessed by teachers, peers, a panel or parents.

When do we assess projects?

Projects can be assessed at each of the key stages – *preparation*, the *process*, *product*, and *response***.**

5.1.2 Internal examinations

Internal end-of-term and end-of-year tests are to be conducted by teachers. These examinations should focus on how well learners can demonstrate their thinking, communication, and problem-solving skills relevant to the areas of the curriculum, which are most essential for continuing to the next grade. Even though summative, these assessments shall be used formatively. Guidelines on internal assessment is captured in the revised SBA including how teachers will plan and deliver this form of assessment.

NaCCA is responsible for leading processes to providing support to the teachers to develop and use internal assessment, whereas the GES implements training programmes for the teachers on internal examinations.

5.1.3 The Common Core Examinations

To promote the development of common core skills in the classroom, there is a need for an assessment at the end of the teaching of this phase of the curriculum that assesses these skills directly. The common core curriculum is currently designed to be completed at Grade 10 and therefore, the Common Core Examinations (CCE) to be conducted by NaCCA would most likely be at the end of Grade 10. This assessment needs to prioritise the validity with respect to the higher order skills in the common core programme (the 'Core Competences').

In addition to paper and pencil tests, CCE is likely to involve more open-ended tasks that may require project work, experiments, problem solving, among others, in order to allow learners the scope to demonstrate the skills required. The scores obtained by learners in the CCE shall be a partial requirement for selection into academic or career-related programmes for Basic 11 to 12 by various schools. The placement shall be done by the schools in consultation with the learners and their parents.

5.2 Assessment practices in the districts

5.2.1 School Education Assessment (SEA)

School Education Assessment(SEA)is a district-based assessment intended for school-level diagnostic use. It aims at highlighting problem areas and not defining the entire domains of the curriculum. It provides teachers with information about what

core domains need to be taught in more depth. The SEA indicates areas of strength, as well as areas where the teacher can make adjustments to address learning needs. It is a minimum-competency-based test that shows the essential elements of the curriculum considered basic to the grade level performance expected for learner continuation.

The assessment measures how well learners can complete core standards within mathematics, English and science curricula. The SEA samples the types of skills that are not well assessed by the National Standards Assessment Tests,but can be addressed in other test item formats. The results of the SEA are to be used to identify teaching and learning challenges to enable initiation and implementation of remedial enrichment and In-Service Training activities to improve teacher performance, pupil achievement and ultimately, the quality of education. Assessment data are kept in the schools and district offices for use in diagnosing potential issues with the implementation or delivery of the curriculum. SEA will be conducted in B3 and B5 biennially. The first results of the SEA will serve as a benchmark (i.e., baseline) for assessing improvement in learners' achievements.

5.2.1.1 Objectives and uses of the SEA Tests

- to diagnose learning difficulties of an individual learner or an entire class.

- identify teaching and learning problems

- provide school officials, district office personnel, and teachers with school-level results, reflecting learner performance on individual items that test specific indicators in the curriculum

- show the areas of the curriculum in which the learners' strengths and weaknesses lie.

- assess effectiveness of instruction by measuring minimum competencies at P3 and P5 in English and mathematics

- generate information on learners for school performance appraisal meeting (SPAM) and local accountability

- to implement an assessment for learning model at the district level.

- to assess constructed response items

- measures how well learners complete core objectives within the subjects of English and Mathematics

- to provide a viable scale to capture the lower levels of competencies that might be present in the learner group and to target areas that have not been taught or taught well

- highlight problem areas within certain areas of the curriculum

- provides teachers with information about what core domains need to be taught in more depth

- identify of pedagogical challenges of teachers and learning problems of learners.

Uses

The SEA will aim to serve the following purposes:

- aid remedial measures to improve learning during the process of instruction.

- aid in programmes improvement for the benefit of the learners.

- for school improvement at the school and district level

- identified pedagogical challenges facing teachers are to be used as the basis of INSETs

- the learning challenges and strengths of learners are used for remediation, enrichment, counselling and school community factor analysis through the conduct of School Performance Appraisal Meetings (SPAM).

- measure how well learners can complete core standards within the subjects; and

- improve learning and teaching in schools by providing rapid and actionable information to guide institutional interventions, and for collecting information about school and learner performance.

The GES is responsible for implementing SEA and providing information to teachers, learners and other stakeholders about SEA. Guidance on SEA is provided in the *SEA Document* (see NaCCA website), which highlights how the test is delivered, what teachers, learners and other stakeholders need to know, and the practical implications for how the examination is produced and delivered.

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5.3 Assessment practices at the National level

5.3.1   National large-scale assessment

The National Standards Assessment Test (NSAT) replaces the existing National Education Assessment (NEA), the National Early Grade Reading Assessment (EGRA) and the National Early Grade Mathematics Assessment (EGMA).

The NSAT has the following objectives:

- provide the country and its regions an overall summary report card in mathematics and English.

- diagnose the state of the education system as a whole

- replace the NEA tests with another reliable learner/system assessment which is directly linked to the curriculum standards

- provide quality and reliable information about schools that can assist the Ministry as well as district and local schools and teachers ascertain the accomplishment of the learners in terms of the essential knowledge and skills embodied in the national curriculum standards.

- provide national indicators for educational achievement in English, mathematics and on educational quality

- identify what the learning gaps are that need to be addressed

- provide information for program and policy evaluation

- monitor and support learning for all.

- identify the proportion of learners reaching key learning standards as outlined in the national curricula of mathematics and English language

- hold schools accountable and to provide learners and their parents with information about learning progress.

- identify the proportion of learners in grades 2, 4, 6, 8 and 11 achieving at least a minimum proficiency level in reading and mathematics, by sex

- support the holistic approach to assessing learners

- help set realistic targets.

- identify institutional needs and, consequently, to allocate resources

Uses

The NSAT will inform educational policies and practices. Though summative, the NSAT will be given formative functions to push learning forward. It will offer the basis to design remediation and support for learners.

Furthermore, it will provide information to aid resource allocation and provide targeted intervention as to which schools and districts need specific interventions, and what the intended outcomes will be for such schools and districts.

The NSAT shall be taken by learners at each key phase. Though summative, the NSAT will be given formative functions to push learning forward.

Having been introduced together with the standards-based curriculum, the NSAT is a census, competency-based assessment programme that reflects the entire curriculum. It provides national indicators for Basic 2, 4,6, 8 and 11on educational achievement in English, Mathematics and Science. The guidelines for NSAT such as the practical implication of how the examination is produced and delivered, are available on the NaCCA website (*put address here)*.

NaCCA is responsible for implementing NSAT and disseminating the NSAT results.

5.3.2 National examinations

National examinations are conducted at the end of Basic 9, 10 and 12.These provide a means of evaluating the extent to which learners are meeting the expectations enshrined in the performance indicators, to help make decisions on the progression of learners to the next phase, placement and/or certification.

5.3.2.1 BECE and WASSCE

The national examinations include the placement exams at the end of Basic 9 currently called the Basic Education Certification Examinations (BECE), and the West African Senior Secondary Certificate Examinations (WASSCE) at Basic 12, are conducted by the West Africa Examination Council (WAEC) and/or other external examination bodies. The guidelines for conducting such examinations,including how they are recorded lie with the external examination bodies. Results from the BECE are used by the Ministry for placement of learners into senior secondary education, and into programmes of study,as well as for certification by the examining bodies. Similarly, the results from WASSCE are used for placement of learners into tertiary institutions and into programmes of study,as well as for certification by the examining bodies.

The objectives of BECE and WASSCE are :

- for evaluating the extent to which learners are meeting the expectations enshrined in the performance indicators.

- to place learners into tertiary institutions and into programmes of study.

- for certification.

The diagram below provides an overview of the different modes of assessment used to assess learners at each Key Phase.
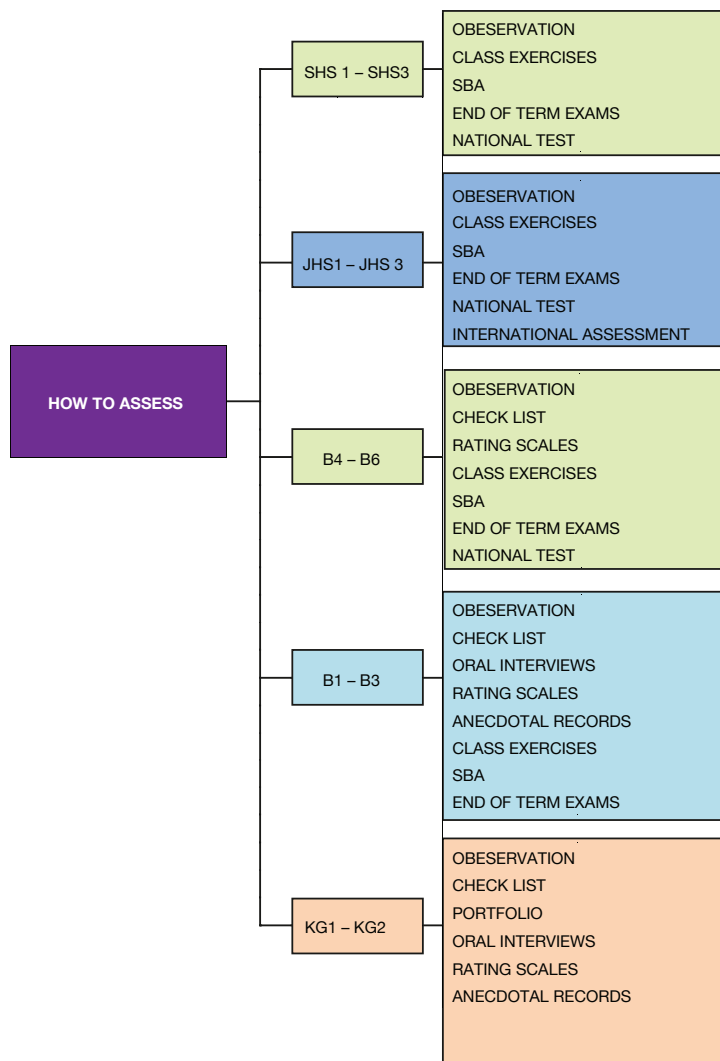
Figure 3: Overview of the different modes of assessment at each Key Phase.

Table 5: Summary of the different forms and modes of assessment related to purposes of assessment

Diagnostic	Formative	Summative
Form of assessment		
Everyday classroom assessment	Everyday classroom assessment	
Class exercises (from textbook or teacher directed)	Class exercises (from textbook or teacher directed)	
Quizzes		
Class tests		Class tests
	SBA internal assessment tasks	
		Examinations • School level: *end-of-term* • School level: end-of-year • National level • District level • International level
Mode of assessment		
Test with objective response questions (e.g. multiple-choice) only	Enquiry activities; Information searching	Test with objective response questions (e.g. multiple-choice) only
Test with a combination of objective and constructed response questions		Test with a combination of objective and constructed response questions
Test with constructed response questions: • Structured questions • Extended response		Test with constructed response questions: • Structured questions • Extended response
Oral	Oral	Oral
	Aural	Aural
	Practical	Practical
Portfolio	Portfolio	Portfolio
	Project work	Project work
Group activity	Group activity	
Self-assessment	Self-assessment	

Diagnostic	Formative	Summative
Peer assessment	Peer assessment	
	Checklist	Checklist
Method of assessment		
On paper	On paper	On paper
On screen	On screen	On screen
Assessment by questioning	Assessment by questioning	Assessment by questioning
Assessment by observation	Assessment by observation	Assessment by observation

5.3.3 International Large-Scale Assessment (ILSA)

Ghana has participated in the Trends in Mathematics and Science Study (TIMSS) 2003, 2007 and 2011. Whilst there may be good reasons for Ghana to participate in such international large-scale assessments (ILSAs) during the lifespan of the *National Curriculum*, the intention is to focus on improving the learning outcomes of learners in Ghana's schools and ensure that nationally, learners are making good progress along performance standards. There is no policy document that addresses the country's participation in ILSAs and until such time that an appropriate policy is put in place, it makes sense for policy makers to focus on consolidating any gain(s) that came with the implementation of the revised curriculum – *National Curriculum.*

Dissemination of National Learning Assessment results

The dissemination of national assessment results will be to all stakeholders according to the interests and technical knowledge of each stakeholder group. The following approaches will be used to reach all stakeholders:

1. writing short summary reports that focus on the main findings for busy policy makers;

2. posting the reports on the MOE and NaCCA's websites

3. press releases;

4. writing special reports for radio and television broadcast;

5. writing reports for schools, teachers, curriculum developers, and teacher trainers

6. disseminating relevant information to all stakeholders. (see the communication plan for the NPLAF)

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In addition to the five approaches, the sixth approach for disseminating NSAT results will include district and regional cluster forums and a national policy forum.

Key participants at the district level cluster forums will include Metropolitan/ Municipal/District Chief Executives, District Directors of Education, Circuit Supervisors, district Training Officers, District Coordinating Directors, Conference of Heads of Basic Schools (COHBS), Mathematical Association of Ghana (MAG), Ghana Association of Teachers of English (GATE) and classroom teachers.

The regional level dissemination will target education policy advocates, the business community, parents, the general public, media outlets, community members, school board members, cultural institutions, Teachers Unions, Parent-teacher organizations, Principals of Colleges of Education and Subject Associations

The national forum is to bring together other stakeholders such as development partners, Members of Parliament, the Academia and members of the National House of Chiefs.

At the school level, the dissemination will be through the School Performance Appraisal Meetings (SPAM)

These meetings will also disseminate the BECE results to stakeholders. See details of participants list of school level SPAM, district level SPAM, etc. in the Circuit Supervisor's Handbook (MOE, 2012).

The WASSCE will be disseminated through the five approaches above in addition to the Chief Examiner's report. The results of TIMSS, PISA and PIRLS if Ghana participates will be disseminated at the district, regional and national levels.

The results dissemination is important for the following reasons:
- give feedback to education stakeholders
- validate the assessment results
- provide a stage for stakeholders to get to the bottom of what the results really are
- foster system growth and give stakeholders the opportunity to set goals and discuss best course of action to use to improve the system.
- help education stakeholders to make corrections in their work and allow them to see where they stand
- inform system-level policies for further monitoring and evaluation of the education system

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- promote buy-in to data-driven decision making in education

5.4 Inclusivity in Assessment

Assessments must be adapted to the unique needs of special schools, and learners with Special Educational Needs(SEN) in regular schools.

As specified in the national standards for inclusive education, teachers are required to (among other things):

- set appropriate standardsand achievable targets for all learners,

- ensure learners can cope with the levels set for them,

- use appropriate pace for all learners, and do not slow down or hurry some learners through the curriculum (syllabus).

- Teachers should provide additional *time for learners with SEN to complete learning activities/tasks and assignment*s. In collaboration with GES, WAEC will continue its current practice of adapting examination sessions to the needs of candidates with visual impairments and learners with other special learning needs.

- All assessment procedures, benchmarks and methods should be revised to ensure equity for all learners, and also provide appropriate and suitable learning equipment, materials, and tools for assessment. (Inclusive Education Policy Implementation Plan, MoE Ghana, 2015-2019). WAEC needs to further extend their adaption support to cover gender constraints that may result in unfair examinations conditions for candidates who are e.g. pregnant or nursing mothers. It is important that the needs of learners are considered from the initial stages of assessment design.

It is imperative to recognise that at every point in time our classrooms are made up of learners that differ in learning abilities, socio-economic status, ethnicity, and expectations. This diversity demands a form of assessment that takes into cognisance such diversities and offer the best to all learners. The standards-based curriculum emphasises assessment that is flexible enough to allow adjustments to overcome any substantial disadvantage that individual learners could experience.

Fair and inclusive assessment recognises and respects the contribution of all learners and ensures that equal opportunity is provided for all learners to demonstrate what they know and can do. Fair assessment must therefore be an integral part of the whole assessment process starting from lesson planning, designing and actual delivery. A fair and inclusive assessment must take into consideration the different abilities,

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backgrounds, needs and interests of all learners. In order to provide all learners with an equal opportunity to demonstrate their learning abilities, we need to consider the different means of assessing a particular learning outcome. Assessment that is differentiated will benefit all learners.

All schools and other stakeholders should provide learners with the opportunity to demonstrate their learning, by adapting their assessment to meet the different needs and interests of learners at all levels.

The current practice of giving extra time to learners with special needs should be maintained. Additionally, the mode of examination should be made flexible for learners with special needs.

For written examinations, the range of adaptation should include the following:

- Reading questions or items to candidates who have reading difficulties.
- Modifying or substituting questions involving visual material such as diagrams, photographs and maps for the visually impaired.
- Providing braille versions of question papers for the blind.
- Providing large print question papers for learners with low vision.
- Permitting candidates to record their answers on tape recorder, or word processor where the candidate has difficulty in writing.
- Permitting a scribe to write answers for a candidate who has speech difficulty.
- Allowing sign language interpreters to sign for the deaf, all instructions during examinations, and ensuring interpreters are available to deal with questions from candidates with deafness during examinations (both internal and external).

5.5 Ensuring the quality of assessment

When conducting assessment, teachers and external assessors must consider the quality of the assessment and the data that it will produce. Good assessment will tell the assessor something that they did not know before, or confirm something for which there was previously no data, such as the performance level that a learner has achieved. To have confidence in the quality of an assessment and any related data, the assessor must ensure that the assessment is valid, reliable and fair.

In order to make valid inferences (judgements) about, for example, what a learner knows and can do, assessments must test the knowledge and skills that they are intended to

test and nothing else.[4]For example, a Science examination that includes questions with long case studies may inadvertently test English language comprehension and reading skills as well as Science knowledge. The assessment must be fit for its intended purpose; which means that assessors must select the most appropriate type of assessment to test the knowledge or skills desired at the chosen Grade. For example, it would not be appropriate to test Kindergarten children or children with weak English language skills using extensive written tests when an alternative method such as a classroom observation could be used.

Reliability is also an important aspect of assessment quality needed to ensure that assessment judgements are fair and consistent. This means, for example, ensuring that teachers use a marking scheme with clear criteria that allows them to mark a test consistently for all of their learners.

All assessors must ensure that the assessments that they deliver are fair. In addition to taking steps to ensure inclusivity shown in the previous section, the assessments must lack bias and discrimination of any kind, and use a range of different contexts, forms and content so that they can be accessed by learners from different social and cultural backgrounds, as well as those with special educational needs.

Different measures can be put into place to ensure validity, reliability and fairness and these must be appropriate for the assessment purpose. For a high-stakes assessment taken across Ghana such as the WASSCE, many procedures are in place to address the way in which assessment is developed, delivered, marked and graded, to ensure validity, reliability and fairness.

If we do not monitor quality, it might lead to inconsistencies in the ways that the different people and institutions who deliver assessment use policy guidelines on assessment. Periodic monitoring of assessment practices in schools is key to ensuring good practice is maintained.

Time is of prime relevance to what learners can produce as evidence of learning under assessment conditions, especially within the context of the individuality of learners. Some learners are fast at academic activities and learning and learning in general, whiles others are steady or slow-going. A fair and valid assessment should consider what learners are able to do by themselves and by their learning pace allowable by their abilities and other conditions. Timing in assessments involving assessments of

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4   This definition of validity is based on the definition from American Educational Research Association et al (2014).

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learning and assessment for learning should be such that whilst assessment should be within specified time, additional time should be available for learners who need it.

5.6 Using assessment data effectively

Data is at the heart of the new approach to assessment in Ghana. Quality assessment produces data that can be used for many purposes, from informing teaching approaches to reporting progress to parents and other key stakeholders. Six (6) different ways in which assessment data can be used effectively are discussed in this section.

1. Designing coherent instruction
Selecting realistic instructional objectives/appropriate teaching techniques

6. Reporting to stakeholders
Reporting to parents and other stakeholders in the education system

2. Designing learner assessment
Diagnosing learner difficulties and providing remedial actions

USES OF ASSESSMENT DATA

1
6
2
5
3
4

5. Maintaining accurate records
For monitoring learners' progress and achievements

3. Selection and placement decisions
For promotion and academic progression

4. Using assessment in instruction
Feedback, reflection on teaching, reflection on learning

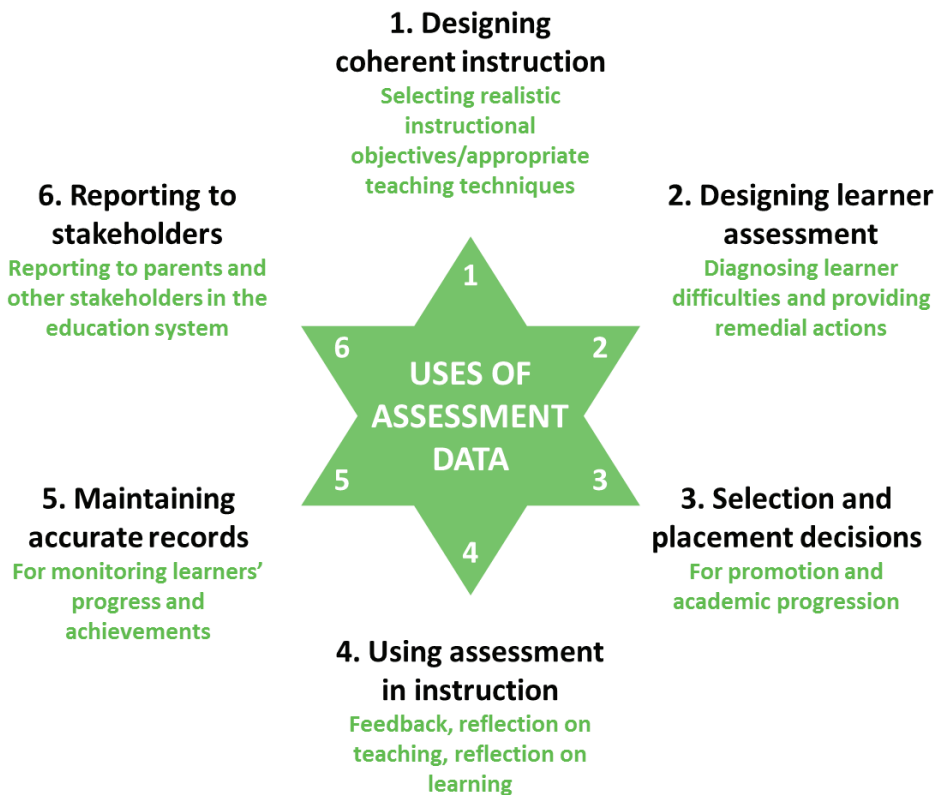**Figure 4:** Ways of using assessment data

5.6.1 Designing coherent instruction

Assessment data should enable teachers to select realistic instructional objectives and adopt appropriate teaching techniques. Performance data from learners enables the teacher to determine how to adapt their teaching to support the acquisition of knowledge and skills. Teachers are also able to adapt their teaching techniques to

match the level of performance of the learners. It also allows the teacher to determine if learners are ready for a particular content of learning.

5.6.2 Designing learner assessment

Assessment data helps the teacher to discover the learning difficulties of the learners and to provide remedial action. This is a diagnostic decision that allows the teacher to determine which learning activities will best adapt to an individual's requirements and thereby maximise the learner's opportunities to attain the chosen learning target.

5.6.3 Selection and placement decisions

Assessment provides information to select the right calibre of learners for admission to institutions of higher learning, promotion to higher grade levels and award of prizes for best performances. It provides information to place learners in courses and classes where they are likely to succeed as well as providing the basis for grouping individuals for classroom instruction in view of their individual differences.

5.6.4 Using assessment in instruction

Assessment data provides feedback or knowledge of results to the learners. This helps learners to identify their own strengths and weaknesses as well as progress through self-reflections. It is however important to note that for the feedback to be effective, learners should not be given only a grade, but be shown where they have gone right or wrong. Learners should be helped to correct their errors before going on to a new task. Assessment data allows the teacher to reflect on their teaching and make the necessary adjustments.

5.6.5 Maintaining accurate records

Assessment data provides a comprehensive picture of a learner's progress and achievement over a period of time. A report card or learner progress books will be used by relevant stakeholders to ascertain the progress made by each individual learner.

5.6.6 Reporting to stakeholders

Assessment reports should be clear, accurate, and of practical value to the stakeholders for whom they are intended. These stakeholders include the learner, parents, teachers, community, managements of schools, educational agencies and civil society groups. Reports to parents, for example, should be comprehensive in outlining the strengths and weaknesses observed in learning and how these will be addressed.

Assessment data shall enable teachers to report accurate information to parents on the performance, achievement and progress of learners. This allows parents to make informed decisions concerning their children's education. Assessment data shall provide information to the policy makers on the status of education. It enables them to identify the strengths and weaknesses in the educational system and to make policies to correct the deficiencies.

5.6.6.1 Reporting/Feedback to learners/ teachers

In the classroom context, effective teachers use various forms of assessment to inform day-to-day and month-to-month decisions about next steps for instruction, to give learners feedback about their progress, and to motivate them. Feedback from various forms of assessment in the classroom—computer-assisted instruction, classroom observation, written work, homework, and conversations with and among learners—all interpreted by the teacher in light of additional information about learners, the schooling context, and the content being studied. These assessments provide specific information about learners' strengths and difficulties with learning. Learners can use this information to determine which skills and knowledge they need to study further, and what adjustments they need to make in their thinking.

Teachers can use information from these types of assessment to adapt their instructions to meet learners' needs, which may be difficult to anticipate and are likely to vary from one learner to another. Providing feedback to teachers on the effectiveness of instruction, the programme, learning activities and learning environment; certifying that learners have achieved certain levels of performance.

5.6.6.2 Reporting to parents and the public

Generally, the assessment findings and reporting programme on learners is used to inform parents/guardians, about the progress learners are making toward achievement of curriculum outcomes. It also helps in communicating with parents/guardians (others) about the progress in learning, appropriate use of instructional materials and the effectiveness of the curriculum being implemented.

5.6.6.3 Reporting centrally (MoE) – informing policy

Assessment findings are used to inform policy makers as well as personnel who make educational decisions (instructional, diagnostic, placement, promotion, graduation, curriculum planning and implementation, programme development) about learners. The specific purposes of reporting assessment findings informs policy makers, the school/school system about important information regarding the relevance of the

curriculum and the effectiveness of instruction and teaching/learning resources. Additionally, it aids in determining whether curriculum outcomes have been achieved, and the next steps or future learning objectives/goals. Policy makers may also use assessment findings to determine whether a learner has attained a certain level of competency after completing a particular phase of education, be it in a classroom unit/team or years of schooling.

5.7 Keeping accurate records

Keeping clear, accurate, up-to-date and factual records is a very important part of a teacher's role and learner development. Teachers and schools need to keep effective assessment records for each learner. This allows both the teacher and learner to reassess the teaching and learning interaction. It provides a platform for teachers to plan their lesson based on the learner's performance.

Classroom assessment results should record learners' performance and progress using SBA. SBA is a system for collecting periodic information on the learners' learning status for the purpose of planning improvement strategies for learners. This information is collected from the learner's classroom activities such as but not limited to: homework, project work (individual and group), exercises, class test and end of term examinations.

The teacher can record marks for performances of learners against different assessment objectives and criteria, and then convert them into a grade at the end of a term or when reports are due. Parents and learners should receive the record of performance relating to the assessment objectives, and an explanation about how these are converted into a final grade. Key stakeholders such as the parents will then understand how the final grades are generated and the criteria used.

Observations about what to record, as well as how to record have been described in this document. However, one way of doing this is for the teacher and the school to keep a copy (paper and digital) of assessment records given to learners which have been annotated by the teacher with precise comments. There are a number of ways to record assessments. Some will be more appropriate to specific subjects and schools need to decide which to use.

Those that can be adapted include:

- Marks derived from assessment relating to assessment objectives recorded digitally or in a SBA book
- A portfolio of a learner's work that has been assessed by the teacher.

- The teacher's summary of marks, comments, feedback, next steps and advice for improvement.
- A summary of achievement and progress, including marks and comments, against learning and assessment objectives.

This should be completed periodically – weekly, monthly or termly, even daily where possible, without taking up too much instructional period.

5.7 Tracking Learner Achievements

In the Ghanaian context, learners receive feedback on their learning in their exercise books, report cards, examination papers, among others, by way of summary of what is needed to be done. Teachers use this to advise learners on where to improve and at the same time report to parents on how this improvement can be achieved. This enables schools and other stakeholders to monitor the progress of learners. Schools also need to decide how often data should be collected for tracking purposes to monitor the progress of the learner right from Key Phase 1 to Key Phase 5. Thus, tracking is not the assessment itself but basically a means to help record and monitor the learners progress and achievement. An important role of tracking is to serve the learner's needs by making sure that appropriate intervention is given for progress. Tracking will be done through cumulative records and portfolios on learners' performance across all grade levels. Teachers in Ghana would be trained and guided on data collection, analysis and reporting for tracking purposes at school, as well as the district, regional and national levels. Additionally, in tracking assessment, learners are referred to guidance and counselling officers for further assistance.

5.8 Data Utilisation

Through effective record keeping, assessment data on the learner can be used for:
- Supporting teachers to plan learning experiences and activities that will meet both the learner's needs and expectations.
- Providing information on what has been learned and what needs to be learned.
- Finding out when a learner is not making expected progress so that appropriate interventions can be put in place.
- Providing teachers, parents, learners and school leaders with information about whether learners are on track to meet the expectations of the standards based curriculum

- Providing information about the progress of each learner, classes, phases, schools, district, region and national.

Similarly, learners should be encouraged to use assessment data to monitor their own performance through a reflective process (Assessment as learning). Supporting learners to use their own assessment data helps them to take ownership of their own learning, and become more independent (confident), and have control of their learning outcomes. Teachers can help learners to do this by sharing clear learning goals, making assessment data easy to understand and use, explaining expectations and assessment criteria clearly and providing precise and constructive timely feedback.

5.8.1 Interpreting Assessment Results

The procedures for summarising and interpreting assessment results should yield accurate and informative representations of a learner's performance in relation to the goals and objectives of instruction.

Summarising and interpreting results refer to the procedures used to combine assessment results in the form of comments and grades which indicate both the learner's level of performance and the evaluation of that performance. Interpretations of assessment results should be made with due regard for the limitations of the assessment methods used, and limitations on the basis of interpretation. Interpretations of results should also consider the learners' background and learning experiences.

5.9 Performance Standards at each Grade

Although all the learning outcomes for a grade level are important and learners are expected to be able to demonstrate their ability to meet the learning outcomes for their grade level, it is not always feasible to assess and report on learners' progress with respect to each individual learning outcome. At the same time, district officials, headteachers, teachers and parents need to be assured that learners are developing the minimal levels of competency required to be successful in subsequent grade levels. To meet this need, the Pre-Tertiary Education Curriculum Framework defines a series of end of grade performance standards for each grade level. Performance standards identify the key learnings that learners must be able to demonstrate, by the end of a grade level, if they are to be successful in subsequent grade levels. This means that assessments at the end of each grade level are based on performance standards set for that grade.

As such, schools should adopt the following grade boundaries for each phase when assessing performance standards for all subjects.

Table 6: Performance Standards at Key Phase 1
KG 1 and KG 2

Level of Proficiency	Level Descriptor
1: Gold (G)	Learner shows high level of proficiency in terms of knowledge,skills, attitudes and values; can transfer them automatically and flexibly through authentic performance tasks
2: Silver(S)	Learner demonstrates sufficient level of proficient fundamental knowledge, skills, attitudes and values; can transfer them independently through authentic performance tasks
3: Bronze (B)	Learner is approaching proficiency in terms of knowledge, skills, attitudes and values; with little guidance;can transfer understanding through authentic performance tasks. Or learner is developing or struggling to attain minimum proficiency in terms of knowledge, skills, attitudes and values but needs help throughout the performance of authentic tasks.

The descriptors (Gold [G], Silver [S] and Bronze (B) indicate the quality of learning and performance of KG1 and KG2.

Table 7: Performance Standards at Key Phase 2 and 3
B1 -B6

Level of Proficiency		Score	Grade Level Descriptor
1: Highly proficient (HP)		80% +	Learner shows high level of proficiency in terms of knowledge, skills and values; can transfer them automatically and flexibly through authentic performance tasks
2: Proficient (P)		66-79%	Learner demonstrates sufficient level of proficient, fundamental knowledge, skills and core understanding; can transfer them independently through authentic performance tasks
3: Approaching Proficiency (AP)		50-65%	Learner is approaching proficiency in terms of knowledge and skills and core understanding with little guidance; can transfer understanding through authentic performance tasks
4: Developing (D)		49% and below	Learner is developing proficiency in minimum knowledge and skills but needs help throughout the performance of authentic tasks. Learner is struggling with his/her understanding due to lack of essential gaps in knowledge and skills

The descriptors (Highly Proficient [HP], Proficient [P], Approaching Proficiency [AP] and Developing [D] indicate the meaning of each grade.

Table 8: Performance Standards at Key Phase 4 and 5
B7-B12

Level of Proficiency	Score	Grade Level Descriptor
1: Highly proficient (HP)	80% +	Learner shows high level of proficiency in terms of knowledge,skills and values; can transfer them automatically and flexibly through authentic performance tasks
2: Proficient (P)	68-79%	Learner demonstrates sufficient level of proficient,fundamental knowledge, skills and core understanding; can transfer them independently through authentic performance tasks
3: Approaching Proficiency (AP)	54-67%	Learner is approaching proficiency in terms of knowledge and skills and core understanding with little guidance; can transfer understanding through authentic performance tasks
4: Developing (D)	40-53%	Learner is developing proficiency in minimum knowledge and skills but needs help throughout the performance of authentic tasks
5: Emerging (E)	39% and below	Learner is struggling with his/her understanding due to lack of essential gaps in knowledge and skills

The grading system presented, shows the letter grade system and the 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 (Highly Proficient [HP], Proficient [P], Approaching Proficiency [AP], Developing [D], Emerging [E]), indicate the meaning of each grade.

6.0 Who conducts assessment?

Assessment is conducted at the school, district and national levels.

6.1 School level Assessment

This involves the learner and teacher. Learners may conduct self-assessment to identify areas of strengths and weaknesses against core competences, knowledge or skills. Encouraging learners to talk about their learning areas that they found challenging and areas where they might be able to improve is an effective teaching and learning strategy. Learners may also be involved in peer assessment where learners work together to evaluate work against clear criteria to better understand where they are in their learning, and what they need to do to improve. In addition to peer assessment and self-assessment, there is also teacher's assessment that is done on a regular basis formatively during learner-teacher interaction and summatively at the end of a unit, term and year. In all these events, teachers are aware of the formal procedures of assessment which are included in the SBA Document.

6.2 District level Assessment

This comprises the district office staff, school improvement and support officers (SISOs), headteachers and teachers. Teachers will get information about what core domains need to be taught in-depth from the pre-tertiary education curriculum. The assessment measures how well learners can complete core standards within Mathematics, English and Science curricula. The results of the assessment will be used by relevant stakeholders including NaCCA, and District Education Offices, to identify teaching and learning challenges in every classroom.

NaCCA will develop the tests and its protocols and the district level offices will conduct the assessment. The results remain in the schools for remediation,in-service training activities and School Performance Appraisal Meeting (SPAM). The SPAM remains one major avenue for engaging community members on assessment and learning. Individual learner performance data is kept in the schools and district offices for use in diagnosing curricula weaknesses. The guidelines for conducting district level assessment is provided in the SEA Document.

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6.3 National Level Assessment

NaCCA and WAEC conduct national assessments. As part of their core mandates, NaCCA conducts the NSAT and the CCE whilst WAEC conducts the WASSCE and BECE. These institutions develop their tests, conduct the examinations and are responsible for marking and grading. The involvement of NaCCA and WAEC in the assessment delivery at this level brings standardisation in the procedures and the conduct of assessment, and also provides actionable data for policy formulation. The placement of learners is high stakes for themselves, parents and teachers and it is important that this is based on good quality, reliable information that is fair for all learners. Therefore, the tests shall prioritise Security, Reliability and Fairness

6.4 International level assessment

Periodically, Ghana participates in international assessment such as Trends in International Mathematics and Science Study (TIMSS) and Programme for International Student Assessment (PISA). National representatives coordinate the conduct of the assessments on behalf of international examination bodies. Results from the international assessment provides contexts to compare the performance of Ghanaian learners and the education system to global benchmarks.
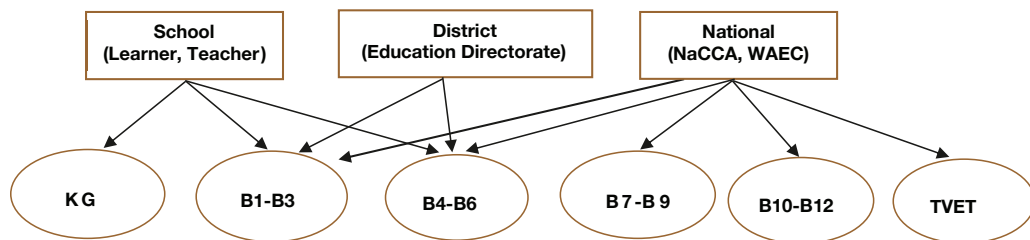

Figure 5: Who assesses and at what level?
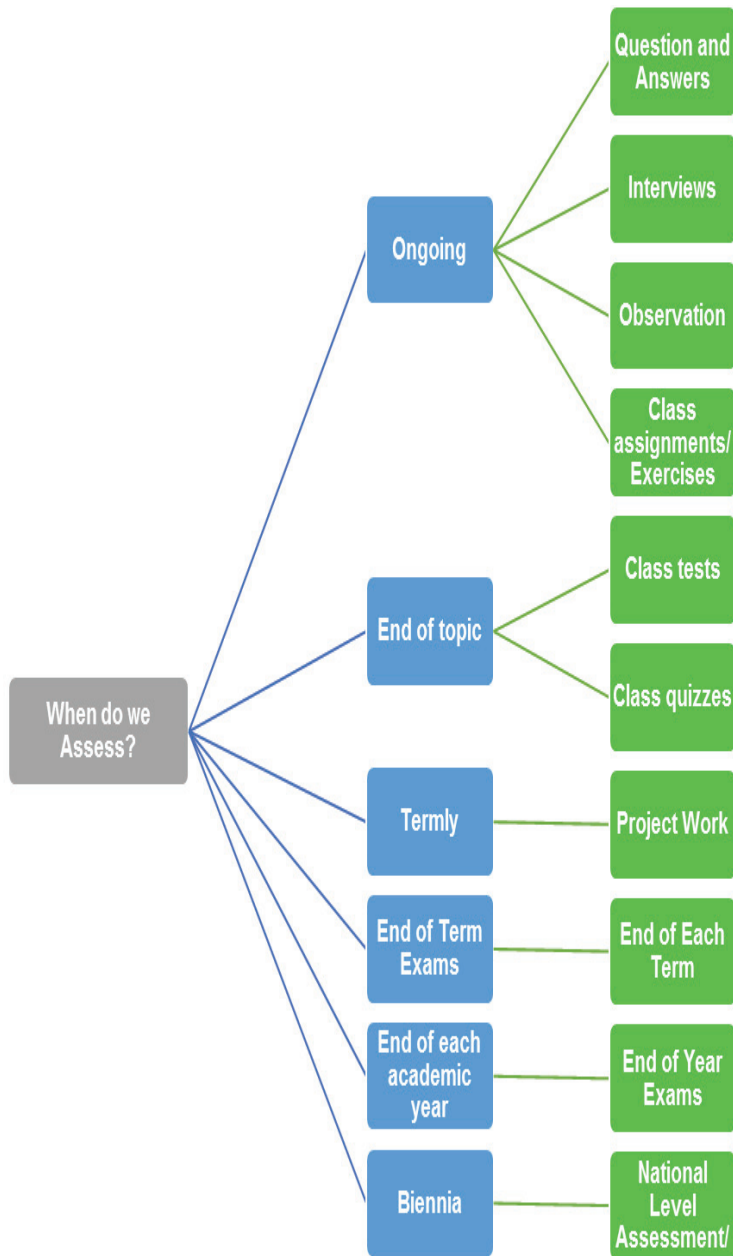
7.0 When do we assess?

Figure 6: Illustration of when to assesses

8.0 Overview of assessment at each Key Phase

8.1 Key Phase 1 (Kindergarten 1 & 2)

8.1.1 Why do we assess?

Assessment in kindergarten entails gathering clear, accurate and timely information on learners to enable teachers determine the learners' strengths, needs and interests. Additionally, it helps teachers to monitor learning progression over time, diagnose exceptionalities, provide information to parents/guardians, and celebrate learning and achievements. It also enables teachers and other staff to identify and document achievement of curriculum expectations, evaluate curriculum and methodology, and enhance learning environments. The overall purpose is to promote intellectual, psychomotor and psychosocial development of the young child, that will serve as a foundation for further educational achievement and lifelong learning. In a more specific sense, we assess at the kindergarten level to:

- monitor learners' performance against set standards;
- determine/diagnose learners' strengths/weaknesses, learning needs, interests and exceptionalities;
- give feedback for improvement;
- determine how learners take control of their own learning;
- develop teaching and learning strategies for individual learners;
- build learners' social, moral and self-confidence;
- provide information to parents and their wards in making educational decisions; and
- find out if learners are ready for promotion to the next level.

8.1.2 What do we assess?

In kindergarten, teachers assess learners' learning in the varied learning areas as outlined in the kindergarten curriculum. Since learners at this phase go through many stages as they grow and learn, kindergarten teachers must focus on individual learner's, knowledge, physical, emotional and social development. Therefore, we assess learners on the following broad dimensions:

8.1.2.1 Core Competences (knowledge, skills, attitudes and values)

- **Knowledge**: Young children are learning these values through example and guidance and by being encouraged to think about acceptable and unacceptable behaviour,knowledge of Ghana and the importance of friendship and co-existence, and healthy lifestyles.

- **Skills**: The teacher is expected to assess learners' ability to communicate, listen, scribble, draw, recognise letters, demonstrate understanding of passages or stories. Teachers must also assess learners on their ability to express their thinking through drawing and manipulation of objects.

- **Attitudes**: Learners should demonstrate an ability to relate with other people and take pride in their own work.

- **Values**: Learners begin to demonstrate honesty, respect, truthfulness and integrity.

8.1.2.2 The 4Rs and core subjects in kindergarten

Assessment at this phase should focus on the 4Rs and content knowledge in the core subjects. Specifically, it will include assessment of:

- Knowledge and understanding in reading, writing, arithmetic and creativity.

- Basic understanding of Ghanaian cultural values such as respect, greetings, etc.

- Use of knowledge in the 4Rs.

- Fluency, comprehension, phonological awareness, alphabetic knowledge, phonics and the concept of writing.

- Level of oral communication in both the Ghanaian languages and English Language.

8.1.3 How do we assess?

Authentic assessment strategies will be used in kindergarten to emphasise learning and thinking, especially higher order thinking such as problem solving strategies. Teachers should use multiple or varied opportunities to collect data on learner's performance. Teachers should use (see SBA for templates for using these strategies):

- Observation check lists

- Portfolio

- Oral interviews

- Concept maps
- Anecdotal records
- Games

The following are three simple assessment strategies that teachers in the KG classroom can use instead of a paper and pencil test.

Observation check lists

The class teacher is in charge of this assessment strategy. He/she should carefully observe children to see, for example, their actions, responses to instructional materials or interactions with other learners. The observation should address the child's physical, cognitive, psycho-motor, emotional, and social aspects of development. The teacher must keep a record in a checklist or a notebook for each child on what they see, hear, what the child says or does.

A checklist is a type of observation tool. A checklist could be developed to capture children's behaviours in a developmental area. The teacher should observe a learner's conceptual knowledge, skills, attitudes, or identifiable behaviours before filling the checklist. Check lists can identify whether key tasks in a procedure, process, or activity have been completed by a child. The tasks may be to check whether a child is following a sequence of steps, or verify that the correct sequence was followed.

Portfolios

A portfolio is a purposeful collection of learners' works to show progress over time. It gives an overall picture of a learner's performance and learning and could show learner's involvement and commitment. It can also be used for learner's self-assessment. The teacher shall keep a comprehensive portfolio for each of the learners showing their progression in the knowledge, creativity, attitudes and skills in the curriculum. The teacher may select a bag, box or any container in which to put the learner's work. Alternatively, the learner's work could be displayed. The portfolio may include samples of learner's works, usually selected by the learner, or by the learner and the teacher to represent learning based on instruction. During open days or conference time with the parents, the learner can share her work with the parents.

Oral Interview

Interviews are an informal or a formal means of providing great insight into how children perceive their world. The teacher asks questions about the children's personal background, activities, writing samples, drawing, reading and interests. The

teacher can keep a record of the outcomes from the interview with each child in a checklist or a notebook.

8.1.4   Who assesses?

The teacher should give very specific instructions on the activity or what he or she expect the learners to exhibit. As a facilitator, the teacher should award marks or scores based on learners' performance or output in the given task. He/she should create the opportunities for learners to observe and talk about each other's work and make comments that can in turn contribute positively to learning. There could also be peer assessment pre-structured by the teacher to promote children teaching themselves how to greet, design a piece of object or engage in an activity. For example, learners can draw and display their work in class so that their peers can give feedback on the work. Guidance needed by kindergarten teachers to deliver assessment at this level is provided in the SBA document.

8.1.5   When do we assess?

At the kindergarten level, assessment is expected to be on-going, and to happen before, during and after instruction. The teacher should conduct regular assessments and document changes in learning progression and behaviour.

8.2 Key Phase 2 (B1-B3)

8.2.1   Why do we assess?

At Basic 1, assessment is conducted for formative, diagnostic and summative purposes using AfL, AaL and AoL. It is conducted to track the development of core competences in learners.

At Basic 2, assessment is conducted for formative, diagnostic and summative purposes using AfL, AaL and AoL. It is also conducted to track the development of core competences in learners and, in the case of the NSAT, for evaluative purposes.

At Basic 3, assessment is conducted for formative, diagnostic and summative purposes using AfL, AaL and AoL. It is also conducted to track the development of core competences in learners.

8.2.2   What do we assess?

Knowledge, application of skills and core competences (including values).

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8.2.3 How do we assess?

Some of the types of assessment used in Key Phase 2 include:

- Class tests
- Class exercises
- Project/group work
- Examinations (end of unit, end of term, end of year)
- Group interaction
- Self-assessment
- Peer assessment
- NSAT (at B2)
- SEA (at B3)

Templates and performance standards will be used to guide teachers (refer to the SBA Document).Similarly, guidance on NSAT and SEA is provided in the NSAT and SEA protocols with sample items for teachers.

In conducting assessments, it is expected that the teacher will:

- Provide specific, honest and objective feedback on the strengths and weaknesses of the learners at the end of the assessment (especially termly report on learners' performance)
- Share and discuss learning goals in the lesson to be achieved by learners.
- Provide immediate feedback on the extent to which the core competences are demonstrated.
- Provide remedial activities that will help slow learners to catch up with the class.
- Encourage learners to assess their work by how much they have learned and by the progress they have made. This will help them take responsibility for their own learning.
- Help learners to understand the criteria by which their learning is assessed so that they can assess their own work.
- Help learners to understand where they are in relation to the expected standards and competences and how to make further progress.

- Give feedback that enables learners to know the next steps and how to succeed in taking them.

- Encourage learners to appreciate their own efforts using a reward system.

- Encourage collaboration among learners and a positive view of each other's attainments.

- Encourage peer assessment.

8.2.4 Who assesses?

- Learner

- Teacher (school level)

- Education Directorate

- NaCCA (national level)

Parents also have a role to play in assessment. It is expected that the parent will engage with teachers and school leaders on discussing learning outcomes of learners. They are also expected to monitor and supervise the completion of learners' take-home assignments.

8.2.5 When do we assess?

Assessment is expected to be an ongoing process, where the teacher assesses before, during and after lessons (throughout the **learning process). It is also expected that assessments are done consistent with assessment practices outlined in the SBA.**

8.2.6 How will data be recorded and used?

The SBA document provides details on how data gathered from various assessments are recorded and used by teachers and other stakeholders.

8.3 Key Phase 3 (B4-B6)

8.3.1 Why do we assess?

Assessment at Key Phase 3 is conducted to diagnose learning needs of learners, monitor progress of learning, give feedback and direction to learners and encourage independent thinking processes that lead to the development of creative skills, enquiry and problem solving abilities, and favourable attitudes and values. Assessment at this phase provides data to allow teachers to further determine the extent to which learners

can self-explore, self-express, build their mental focus and skilfully use their hands to create new things. In all, teachers and other stakeholders are able to leverage on assessment data to benchmark learners' learning against the phase level performance standards, to identify learners for remediation or placement.

The subjects taught in Key Phase 3 are:

- Literacy - Ghanaian Language, English, French
- Mathematics
- Science
- Creative Arts
- History
- Our World Our People

8.3.2 What do we assess?
- Reading skills
- Writing skills
- Speaking skills
- Listening skills
- Practical skills
- Subject content knowledge
- Attitude and values
- Core competences such as critical thinking and problem solving, creativity and innovation, communication and collaboration, cultural identity and global citizenship, personal development and leadership and digital literacy

8.3.4 How do we assess?
- Everyday classroom exercises/tasks
- Weekly tasks/end of unit test/end of term
- Oral assessment (e.g. Role play, drama
- Essay type test
- Observations

Guidance on NSAT and SEA is provided in the NSAT and SEA protocols.

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8.3.5 Who assesses?

- Learner (self and peers)

- Teacher

- Education Directorate

- NaCCA will develop the test and implement it in collaboration with GES and WAEC and also any identifiable body capable of conducting large scale assessments.

8.3.6 When do we assess?

Assessment at Key Phase 3 is also expected to be a continuous process, where the teacher assesses before, during and after lessons. It is also expected that assessments are done consistent with assessment practices outlined in the SBA Document.

8.4 Key Phase 4 (B7-B9)

8.4.1 Why do we assess?

Assessment is conducted largely for learning and for providing feedback (as AfL is an integral part of the teaching and learning processes).

Providing feedback on learning helps learners to know where they are in terms of expected learning outcomes. Feedback also helps teachers to vary assessment methods to enable them to measure learning more accurately. It also promotes Assessment as Learning, where learners reflect on what they have learned and achieved at any time.

Formative feedback given at the appropriate time can also guide Junior High School learners to make decisions regarding future programmes they will like to study at the next level of the education system. For example, learners who perform well in particular subject areas and are aware that they are performing well, through feedback, can prepare themselves better for any future work in those subject areas.

Assessing to provide either formative or summative feedback can also help other stakeholders such as parents to monitor the progress of learners against set targets.

In addition to using Assessment for and as Learning, assessment can provide data for the evaluation of a school's progress regarding supporting learners to achieve expected learning outcomes.

8.4.2 What do we assess?

Assessment at the Junior High School measures learners' fundamental knowledge and skills in key subjects. In many subject areas, learners need to know the facts that underpin the skills they develop. Without such contextual subject knowledge, it will be difficult for learners to understand why things are done in a particular way or why they should not be done in a particular way.

In addition to knowledge, teachers assess skills to ensure that learners can apply their knowledge in appropriate ways,e.g. practical demonstration of dexterity on hand-on activities. Such application can be demonstrated in other areas such as the application of numeracy skills. For example, to be able to count in forties, it is helpful for them to be able to count in fours (e.g., 4, 8, 12, …). Having established the number facts involving multiples of four, they can easily apply this to counting in forties by simply multiplying each multiple of four by ten (e.g., 40, 80, 120, …).

Core competences are also assessed at the Junior High School level. These competences are critical thinking and problem solving (CP), communication and collaboration (CC), cultural identity and global citizenship (CG), cultural identity and global citizenship (CIGC) and digital literacy (DL).

In CP, learners are required to persevere and take responsibility for their own learning. Assessing this will not only measure the extent to which learners can demonstrate this competency, but also draw learners' attention to its importance. This goes for the other competences, albeit teachers may find it difficult to assess some of these with the required accuracy. For example, assessing personal development and leadership at the Junior High School level requires teachers to measure the extent to which learners demonstrate moral integrity. Teachers should be encouraged to design assessment activities to measure such soft skills as these will encourage learners to develop the competences.

Table 9 below presents the relationships among the key learning areas.

Table 9: Relationships among key learning areas

Key learning areas	GLEFLR	MSC	CHOP	
Fundamental knowledge and skills	✓	✓	✓	
Practical skills and dispositions		✓	✓	
Core competences	KNOWLEDGE	SKILLS	ATTITUDES	VALUES

Critical Thinking and Problem Solving (CP)		✓	✓	✓
Creativity and Innovation (CI)		✓	✓	✓
Communication and Collaboration (CC)	✓	✓	✓	✓
Cultural Identity and Global Citizenship (CG)	✓	✓	✓	✓
Personal Development and Leadership (PL)	✓	✓	✓	✓
Digital Literacy (DL)		✓	✓	✓

8.4.3 How do we assess?

There is a wealth of assessment methods used in education to assess learners' achievements. The primary goal is to choose a method which most effectively assesses the indicators of the content standards. In addition, the choice of assessment methods should be aligned with the overall aims of the programme, and may include the development of disciplinary skills (such as critical evaluation or problem solving) and support the development of vocational competences (such as communication and collaboration).

Hence, when choosing assessment items, it is useful to have one eye on the immediate task of assessing the learner's learning in a particular unit of study, and another eye on the broader aims of the programme and the qualities inherent. Ideally this is something a teacher should do with their academic colleagues so there is a planned assessment strategy across a programme.

In any case, assessing learners using a combination of different methods is likely to lead to more reliable and valid assessments because the limitations of these individual methods can be addressed by the strengths of others. For example using multiple choice and essay questions to measure the same construct can help the teacher to ascertain better the performance of learners, than would be the case if only one method was used. The common methods that are used to assess at the Junior High School level are question and answer, class test, class assignments, project work, class quizzes, interviews and examinations, conducted mainly at the end of a term or end of an academic year. Guidance on NSAT and SEA is provided in the NSAT and SEA protocols.

8.4.4 Who assesses?

Table 10 below describes the relationship between the methods of assessment, and who assesses at the Junior High School level of education.

Table 10: Relationship between methods of assessment, and who assesses at the Junior High School level of education

How (Methods)	Who assesses?						
	Self	Peer	Class Teacher	Panel/ Jury	District	National	WAEC
Question and answer	✓	✓	✓				
Observation		✓	✓				
Questionnaire/One-minute paper, etc.	✓	✓	✓				
Interviews		✓	✓				
Class assignments			✓				
Class tests			✓				
Class quizzes			✓				
Project work/Practical	✓	✓	✓	✓			
End of term examination			✓				
End of grade examination			✓		✓	✓	
End of programme assessments						✓	✓

8.4.5 When do we assess?

- Daily –for formative assessment purposes.
- Weekly (for subjects that are taught weekly) – for formative assessment purposes.
- Class end-of-term – (last week of the term)
- Class end-of-year – (last week of the year)
- National end-of-year – (a month to the end of year)
- End of programme – (last month of the programme)

8.4.6 How will data be recorded and used?

The SBA document provides details on how data gathered from various assessments are recorded and used by teachers and other stakeholders.

8.5 Key Phase 5 (SHS 1-3)

8.5.1 Why do we assess?

The same overall principles of assessment apply at the Senior High School (SHS) level as at Key Phase 4, but there are some differences in application. Results from the Common Core Examination at SHS1 will determine which options should be available to learners in terms of subject selection for SHS2 and SHS3.

Providing feedback on learning helps learners to know where they are in terms of expected learning outcomes. Feedback also helps teachers to vary assessment methods to enable them to measure learning more efficiently. It also promotes Assessment as Learning where learners reflect on what they have learned and achieved at any time. SBA should be used during SHS2 and SHS3 for formative purposes, identifying areas for further development across the different subjects.

Formative feedback given at the appropriate time can also guide Senior High School learners to make decisions regarding future programmes they will like to study at the next level of the education system. For example, learners who are academically strong are likely to choose to go on and sit the WASSCE examination to enable university entry.

In preparation for the WASSCE, learners will sit a mock examination. The purpose of this examination is to review essential areas and skills in the topics learnt during the year, and for learners to become familiar with the examination format and procedures for the WASSCE. This must also be a learning experience in how to use time in an examination, and how to interpret and answer questions so that learners become confident in an examination situation. A mock examination will be written at the end of B11(i.e., SHS3)to further prepare for the external examinations, and to give preliminary information for applications for work, bursaries or further studies.

8.5.2 What do we assess?

Assessment at the Senior High School level measures learners' fundamental knowledge and skills in key subjects. In many subject areas, learners need to know the facts that underpin the skills they develop. Without such contextual subject knowledge, it will be difficult for learners to understand why things are done in a particular way or why they should not be done in a particular way.

In addition to knowledge, teachers assess skills to ensure that learners can apply their knowledge in appropriate ways including practical demonstration of dexterity on hand-on activities. Such application can be demonstrated in other areas such as

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the application of numeracy skills. For example, to be able to count in nineteens, it is helpful for learners to be able to count in twenties (e.g., 20, 40, 60, …). Having established the number facts involving multiples of twenty, they can easily apply this to counting in nineteens by simply counting in twenties and subtracting the multiplier (e.g., 19, 38, 57, …).

Core competences are also assessed at the Senior High School level. These competences are critical thinking and problem solving (CP), communication and collaboration (CC), cultural identity and global citizenship (CG), cultural identity and global citizenship (CIGC) and digital literacy (DL). In CP, learners are required to persevere and take responsibility for their own learning. Assessing this will not only measure the extent to which learners can demonstrate this, it will draw learners' attention to the importance of the competence because it is assessed. This goes for the other competences, albeit teachers may find it difficult to assess some of these with the required accuracy. For example, assessing personal development and leadership at the Senior High School level requires teachers to measure the extent to which learners demonstrate moral integrity. Teachers should be encouraged to design assessment activities to measure such soft skills as these will encourage learners to develop the competences.

8.5.3 How do we assess?

There are a wealth of assessment methods used in education to assess learners' achievements. The primary goal is to choose a method which most effectively assesses the objectives of the unit of study. In addition, the choice of assessment methods should be aligned with the overall aims of the programme, and may include the development of disciplinary skills (such as critical evaluation or problem solving) and support the development of vocational competences (such as communication and collaboration). Hence, when choosing assessment items, it is useful to have one eye on the immediate task of assessing learner learning in a particular unit of study, and another eye on the broader aims of the programme and the qualities. Ideally this is something a teacher should do with their academic colleagues so there is a planned assessment strategy across a programme.

In any case, assessing learners using a combination of different methods is likely to lead to more reliable and valid assessments because the limitations of these individual methods can be addressed by the strengths of others. For example, using multiple choice questions and project work to measure the same construct can help the teacher to ascertain better the performance of learners, than would be the case if only one method was used. The common methods that are used to assess at the Senior High School level are question and answer, class test, class assignments, project work, class

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quizzes, interviews and examinations, conducted mainly at the end of a term or end of an academic year. Guidance on NSAT is provided in the NSAT protocols.

8.5.4 Who assesses?

Table 11 below describes the relationships between the method of assessment and who assesses at the Senior High School level of education.

Table 11: Relationships between the method of assessment and who assesses at the Senior High School level of education

How (Methods)	Who assesses?						
	Self	Peer	Class Teacher	Panel	District	National	WAEC
Q/A,	✓	✓	✓				
Observation,		✓	✓				
Questionnaire/One-minute paper, etc.	✓	✓	✓				
Interviews,		✓	✓				
Class assignments,			✓				
Class tests,			✓				
Class quizzes,			✓				
Project work,	✓	✓	✓				
Examinations							
- End of term			✓				
- End of grade			✓	✓	✓	✓	
- End of programme							✓

8.5.6 When do we assess?

- Daily –for formative assessment purposes
- Weekly (for subjects that are taught weekly) – for formative assessment purposes
- Class end-of-term – last week of the term
- Class end-of-year – last week of the year
- National end-of-year – a month to the end of year

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- End of programme - last month of the programme.

8.6 TVET

Assessment for TVET supports the learning and practice of learners. It is achieved through a variety of formative and summative assessments that enable learners to demonstrate what they know and can do from the trade areas and programmes.

8.6.1 Why do we assess?

Assessment for formative and diagnostic purposes is used to find out where learners are regarding their progression in the knowledge of the subject, key skills and competences at specific levels of their training. This also includes the acquisition of procedural knowledge in the use of equipment during practice.

Assessment for summative purposes is used to provide information for grading and certification. Assessments should promote collaboration rather than competition in the class. Hence the use of grading must not lead to creating a hierarchy but be used as a means of identifying the different attainment levels of learners which should be used in the remediation activities.

Other expectations for why we assess include the use of assessment to provide feedback and support. One type of support could be remediation involving identifying slow and low performing learners. It provides opportunity for teachers to engage this group of learners in a direct way to support them to catch up.

8.6.2 What do we assess?

Knowledge (subject content knowledge, procedural knowledge i.e. relating to how learners apply skills in the manipulation of equipment to perform a specific task) is assessed to determine the extent to which the learners know and can do what has been learnt.

Core competences (values and attitudes, soft skills) are assessed to establish if learners can demonstrate acceptable professional values and ethical standards (e.g. punctuality, customer service, safety precaution etc). Learners are also asked to demonstrate their level of competency in manipulating equipment to produce an artefact.

Workplace Experience Learning (WEL) is also assessed. This involves posting or sending learners on attachment to the industry (workshop, garages, shop, etc) to understudy practitioners (Master Craft Persons -MCPs) and acquire hands-on experience.

8.6.3 How do we assess?

- Building Evidence File: Creating a portfolio of evidence on assessment results (both formative and summation) of the learner.

- Practical: Activity undertaken by the learner(s) to demonstrate acquisition of required skills and abilities.

- Observation: The action or process of closely monitoring the learner and/or task using acceptable rubrics.

- Project Work: Work-based activity assigned to the learner to perform within the school or outside the school to demonstrate acquisition of competency and soft skills such as communication, collaboration, team work and team building.

- End of term assessment: Assessment carried out at the end of the programme or course to determine learners' acquisition in all the learning domains.

8.6.4 Who assesses?

i. *School level (Facilitator)*

    The individual who delivers the curriculum content and also conducts assessment at the school level.

ii. *National level/National Examinations (Assessors from Technical Examinations Unit)*

    External agency mandated to conduct assessment at the national level.

8.6.5 When do we assess?

Assessment takes place weekly via class exercises, assignments and homework. Termly assessments are carried out at the end of a topic/unit. Additional assessment is conducted at the end of a topic/unit.

Implications for delivery

- TVET will include different approaches to assessment with different institutions such as the Technical Examinations Unit. It is important to emphasise how and why assessment will differ here and the institutions that will be involved.
- Will the institutions involved in delivering have enough capacity to deliver it?
- What do teachers, learners, schools, parents and other stakeholders need to know about how the assessments will be delivered and the external agency involved?
- How will data be recorded and used from these assessments? Teachers will need a practical sense of what they will be asked to do.

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The future of assessment in Ghana

ICT will play an increasingly large role in assessment in Ghana in the future. A new online assessment will be developed at the SHS level and technological innovations are likely to be adopted to improve data recording and integration.

Improvements in the quality of data collected from assessments and the ways in which data is recorded will allow more effective monitoring and evaluation of learners, schools and the education system as a whole. This will be beneficial in providing data to support learners, parents and teachers in making decisions about progression, particularly when a TVET route might be most appropriate.

The Assessment Framework and Curriculum Framework combine to present a new approach to teaching, learning and assessment in Ghana. The implementation of this new approach will be supported by a strong focus on teacher professional development, utilising resources to support teachers in their own districts and online to ensure that they understand the new approach to teaching, learning and assessment. Documentation and training will be provided to ensure that teachers feel able to adapt their practice to include the new teaching and assessment techniques.

SBA shall be reviewed to align with contemporary or emerging assessment issues and the Assessment Framework. The dimensions or areas and the extent of the review shall be considered by experts.

There will be a timeline on the development of the NSAT and other large scale assessments.

- General Guideline for Planning Assessment

- Ensuring a balance between formative and summative assessment

- Practical guidance on where teachers find information about delivering assessment in their subject and grade

- The need for teachers to know quality or malpractice procedures

- Assessment accommodation (issues of timing and scheduling in assessment)

Given the diversity and individuality of learners, the timing and scheduling of assessment shall be accommodating, in the sense that different assessments should be utilised to suit different times. Whilst the incidence of assessment in the SBA is central to assessment practices in schools, scheduling and timing in assessment needs to suit both the teacher and learners. Scheduling and timing assessment would be based on:

- the nature of assessment task;

- learning disabilities and other learning difficulties (slow-going learners, learners with limited dexterity due to arthritis, learners who potentially lack continuous concentration over a testing period, etc.)

- exceptionality in abilities;

- health-related disabilities;

- examination contingencies (lateness, learners providing erroneous answer and detecting it during the period of testing, etc.); and

- children outside of mainstream schooling.

- Samples or guidelines to development assessment tools such as checklist, observation, questionnaire for assessing the core competences, test etc. (issues of test blueprint and item bank development)

- Monitoring and Evaluation Framework for the assessment system

- Guidelines for monitoring

- Monitoring tool and accessories

- Guidelines for teachers on reporting and how to use data

- Guidelines for professional development in assessment

- Grade-specific performance standards in each subject area

- Map out when changes will be introduced, for example the ideas below;

- Revise the WASSCE to use the differentiation between papers approach.

- There will be 6 years of secondary education which will terminate at SHS 3 with a compulsory examination for all.

- At the end of SHS 3, all learners will write the national examinations at the same time, but will write differentiated test papers having associated differentiated certificates.

- The learners can take a general education or TVET path at the end of JHS 3.

- Learners will move from JHS to the SHS/TVET through placement exams.

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