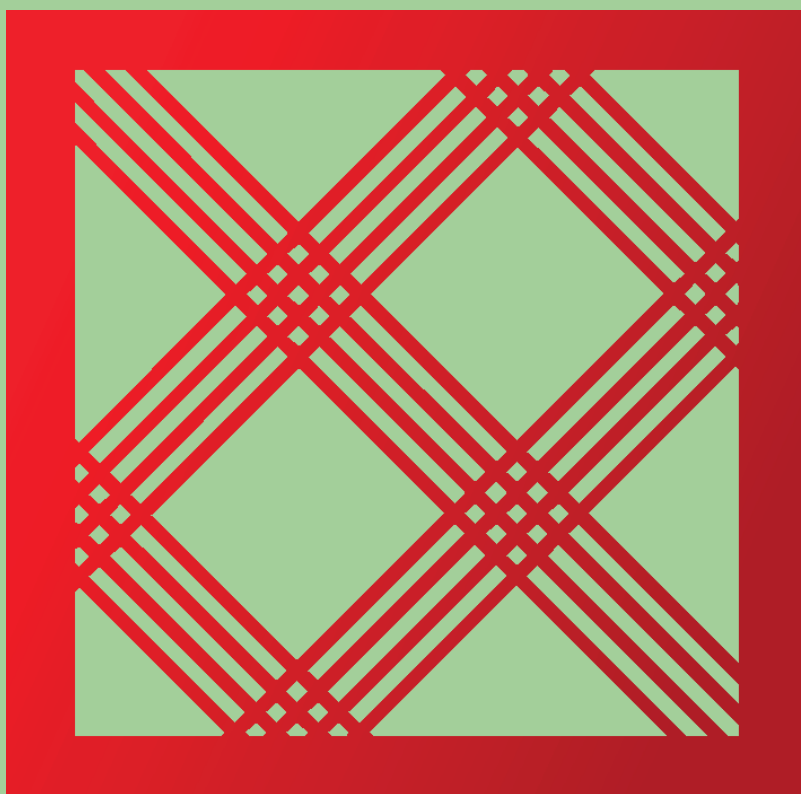


# TEACHER ASSESSMENT MANUAL AND TOOLKIT

## HANDBOOK FOR TEACHERS



NKYIMU/SKILLFULNESS



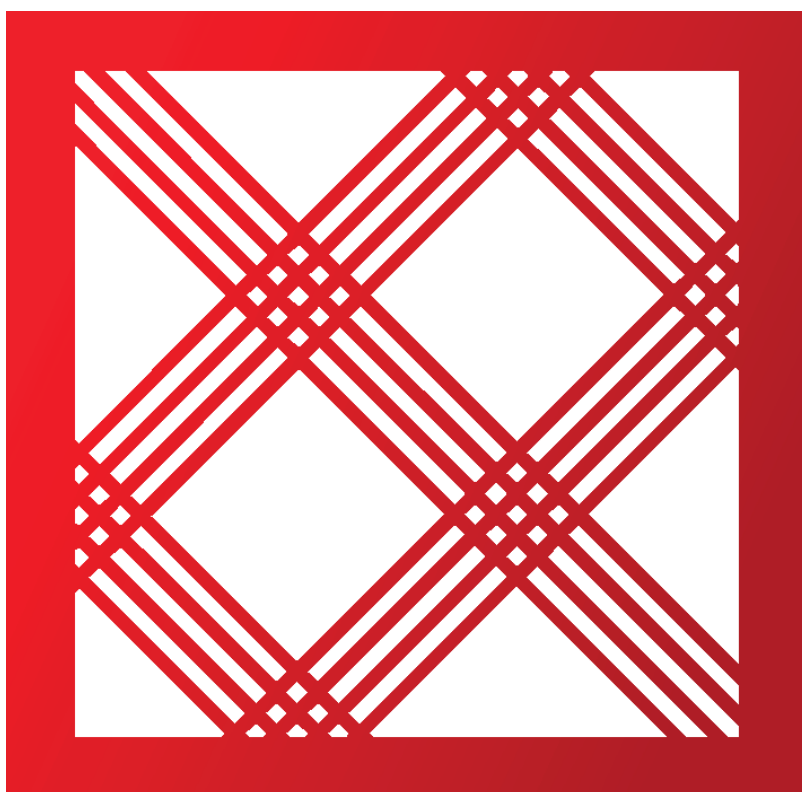
MINISTRY OF EDUCATION  
REPUBLIC OF GHANA



NATIONAL COUNCIL FOR  
CURRICULUM & ASSESSMENT  
OF MINISTRY OF EDUCATION

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REPUBLIC OF GHANA



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# FOREWORD

Education is a dynamic voyage—a perpetual exploration, comprehension and growth process. At its core, the transformative journey of education hinges on the vital compass of assessment, directing teachers and learners toward meaningful outcomes. This manual, therefore, is a testament to our commitment to educational excellence, which seamlessly integrates with Ghana’s broader curriculum reforms led by the Ministry of Education through the National Council for Curriculum and Assessment (NaCCA). These reforms, initiated to enhance the quality and relevance of pre-tertiary education, emphasise critical thinking, problem solving and the acquisition of 21st-century skills.

With great pleasure, we introduce the Teacher Assessment Manual and Toolkit, a comprehensive manual designed to support the effective use of the various assessment strategies in the delivery of lessons as intended in the new Senior High School (SHS), Senior High Technical School (SHTS), and Science Technology, Engineering, and Mathematics (STEM) curricula.

In crafting this manual, the primary goal was to provide teachers with a robust tool that outlines the principles of effective assessment and offers practical strategies to enhance teaching and learning experience. We recognise that assessment is not merely about evaluation; it is a multifaceted process that shapes the educational landscape and contributes significantly to the development of both teachers and learners.

The manual explores various forms of assessment, from the formative, where learning is ongoing and dynamic, to the summative, marking the culmination of a learning phase. It delves into diagnostic assessments, offering insights into learners’ prior knowledge and paving the way for tailored pedagogical strategies. Furthermore, it underscores the importance of differentiation, recognising and accommodating every learner’s diverse needs and strengths. A distinctive feature of the manual is its emphasis on aligning assessment practices with the SHS, SHTS and STEM curricula, ensuring that assessment processes are intricately woven into the pedagogy in delivering the new curriculum.

We also highlight the principles of validity, reliability, fairness and ethics, emphasizing the importance of transparency in the assessment journey. As we navigate the 21st century, the role of technology in education becomes increasingly significant. Therefore, the manual incorporates guidance on leveraging technology, especially in e-assessments, reflecting our commitment to staying current with evolving global education. Inclusivity is a cornerstone of our approach. We advocate assessments that consider the diverse needs of learners, promoting fairness and equity. It provides practical examples and strategies to create an inclusive assessment environment that fosters the growth and development of all learners.

This manual is not a static document but a dynamic companion for teachers on their journey of continuous improvement. It encourages reflection, adaptation and innovation, empowering teachers to refine their assessment practices continually.

Prof. Edward Appiah

*Director General*

*National Council for Curriculum and Assessment (NaCCA)*



# ACKNOWLEDGEMENT

The Teacher Assessment Manual and Toolkit is a significant achievement in pursuing educational excellence. It is a testament to the visionary efforts of the Ministry of Education (MoE) and the National Council for Curriculum and Assessment (NaCCA) to ensure that schools implement the new secondary education curriculum successfully. This manual draws inspiration from the approved National Pre-Tertiary Learning Assessment Framework (NPLAF), the Secondary Education Assessment Framework (SEAF), the new Curriculum for Secondary Education and the Subject Teacher Manuals NaCCA developed to improve learning outcomes.

Sincere thanks to the Ministry of Education for providing strategic and oversight direction. To our esteemed partners - the West African Examinations Council (WAEC), the Ghana Education Service (GES) and other MoE agencies for playing instrumental roles during discussions that shaped the development of the Teacher Assessment Manual and Toolkit. We are grateful for the unwavering support.

Specific gratitude to the diverse contributors, including writers from academia and industry players, and the vibrant community of teachers and learners across the educational landscape. A reserve recognition for the consultants who lent their expertise, guiding the development process with dedication and insight that enriched the manual. Special acknowledgement to Professor Eric Anane for steering the development of the teacher assessment manual and toolkit towards excellence.

Most important, the MoE and NaCCA are grateful for the generous funding provided by the Mastercard Foundation and to the Transforming Teaching, Education and Learning (T-TEL) for providing technical and financial support throughout.

## ACRONYMS

AaL	Assessment as Learning
AfL	Assessment for Learning
AoL	Assessment of Learning
CPD	Continuous Professional Development
CTVET	Council for Technical Vocational and Educational Training
DEO	District Educational Officers
DoK	Depth of Knowledge
GES	Ghana Education Service
GESI	Gender Equality and Social Inclusion
GTEC	Ghana Tertiary Education Commission
ICT	Information and Communication Technology
MoE	Ministry of Education
NaCCA	National Council for Curriculum and Assessment
NaSIA	National School Inspectorate Authority
NPLAF	National Pre-tertiary Assessment Learning Framework
NTC	National Teachers Council
PLC	Professional Learning Community
SBA	School-Based Assessment
SDGs	Sustainable Development Goals
SEAF	Secondary Education Assessment Framework
SEL	Socio-Emotional Learning
SEN	Special Educational Needs
SHS	Senior High School
SHTS	Senior High Technical Schools
STEM	Science Technology Engineering and Mathematics
WAEC	West African Examinations Council

# INTRODUCTION

## 1.1 Rationale

Assessment is the process of collecting information on the learner to help in deciding the degree to which the learner has achieved the expected learning outcomes/standards among others. The Secondary Education Assessment Framework (SEAF) has been developed to guide how learners within and across the Senior High School (SHS) grade levels are assessed. The SEAF reiterates the main ideas and principles of assessment outlined in the National Pre-tertiary Learning and Assessment Framework (NPLAF). Consequently, the SEAF proposes two forms of assessment, i.e., Formative (assessment as learning – AaL, assessment for learning – AfL) and Summative (assessment of learning – AoL). It also provides suggestions on how to conduct internal and external assessments in schools to promote self-directed learning and improve teaching and learning outcomes.

## 1.2. Purpose

The Teacher Assessment Manual and Toolkit is to provide general guidance for secondary school teachers to help them design, develop and effectively use assessment strategies outlined in the Senior High Schools (SHS) or Senior High Technical Schools (SHTS) and STEM curriculum, evaluate student learning and promote academic growth.

**The teacher assessment manual and toolkits, therefore, is to serve several essential purposes:**

**Standardisation of Assessment:** The manual is to help establish a standardised approach to assessing learners' performance and progress across different subjects or learning areas within SHS/SHTS. It outlines clear criteria and strategies for assessing learning outcomes.

**Alignment with Curriculum and Standards:** The manual is intended to foster the alignment of teaching and learning activities, assessment and learning outcomes. It will help to ensure that assessments reflect what learners are expected to learn based on the educational standards set by the curriculum.

**Guidance for Teachers:** This teacher assessment manual provides guidelines, instructions and rubrics for teachers to effectively assess learners' knowledge, skills and competencies. This ensures that teachers have a structured framework to follow when assessing learning outcomes.

**Consistency and Fairness:** By providing specific criteria and assessment guidelines, the manual promotes consistency and fairness in scoring, grading and evaluation among teachers within the same school or across different schools. This reduces subjectivity in assessment practices.



**Professional Development:** The teacher assessment manual is to serve as a tool for professional development. It provides teachers with insights into effective assessment strategies, enabling them to continuously improve their teaching and evaluation approaches.

**Learner Learning Enhancement:** Clear assessment guidelines and criteria outlined in this manual will help learners understand what is expected of them. This clarity can motivate learners to focus on specific learning standards, leading to improved learning outcomes.

**Accountability and Feedback:** Having standardised assessment practices enables schools and educational authorities to track learner progress effectively. It also allows constructive feedback to both learners and teachers, helping them identify areas that need improvement.

# PRINCIPLES OF EFFECTIVE ASSESSMENT

As a process of determining the nature and extent of learning and development among learners, it is important to ensure that the assessment process meets the following principles:

1. Validity
2. Reliability
3. Fairness and ethics
4. Transparency
5. Inclusivity
6. Practicability
7. Assessment utility

## 2.1 Developing a Valid Assessment (Validity of Assessment Results)

To ensure that assessment scores or results are useful and interpreted appropriately, the teacher should:

- Clearly state the purpose of the assessment (e.g. what the test will be used for).
- Create a learning and assessment plan (i.e. table of test specification totos)
- Write assessment items or tasks that measure important learning outcomes of the curriculum (e.g. skills, competencies, collaborative efforts and lifelong learning).
- Clearly define the performance criteria or standards/schemes/rubrics (i.e. define the specific knowledge, skill or behaviour that learners should demonstrate)
- Score or grade assessment tasks based on the performance criteria to avoid biases, stereotyping among others.
- Ensure that the content of the assessment aligns closely with the defined criteria (thus, the assessment questions, tasks or activities should directly measure what they want to assess).
- Interpret the assessment results based on the purpose and the performance criteria.

## 2.2 Reliability (Consistency of Assessment Results)

In assessment, consistent standards of teacher assessment and fairness are important goals to aim for. The 'connoisseur' approach to assessment; that is, 'I know it when I see it but I can't put it into words' is not acceptable. Reliable results must be dependable for decision-making.

*For an assessment result to be reliable, the teacher should:*

- Clearly identify the learning outcomes to be assessed.
- Give learners' work or completed assessment tasks and activities to another teacher (s) to review.

- Use multiple assessment strategies to measure the same or similar learning outcomes (e.g. giving the tasks or items of a class exercise as another class exercise or homework or group project) or using different item formats to assess learning outcomes.
- Prepare scoring rubrics or marking schemes with specific weighting (marks) allocated to the items and use it consistently.
- Give rubrics of tasks/activities in the case of performance or practical assessment ahead of time.
- Ensure that the load or the length of the tasks are appropriate to the level of the learner (e.g. 25 minutes for 20 items; a project for a week or the term/ semester).
- Administer assessment in a conducive environment that minimises disruption (e.g. noise, lightening, ventilation among others) and is devoid of any cheating.

### 2.3 Fairness and Ethics

Assessment strategies should give learners an equitable opportunity to demonstrate what they know and can do taking into consideration their ability, learning styles, gender, Special Educational Needs (SEN) among others.

*The teacher should:*

- Ensure that the assessment tasks/activities align with the learning outcomes and content covered in class.
- Use different forms of assessment tasks to assess learning outcomes (e.g. oral assessment, class exercises, class tests, homework, assignments, written tests, projects and practical demonstrations, as well as the end-of-term/ semester assessment).
- Provide clear and detailed instructions to learners about the assessment format, expectations, and criteria for evaluation.
- Identify learners with SEN and make the necessary adaptation by providing extra time, alternative formats and other necessary accommodations.
- Avoid using culturally biased or discriminatory content, unfamiliar words, questioning or examples in assessments.
- Communicate the assessment plan in advance. For example date, time, location and any other relevant logistics.

### 2.4 Transparency

Transparency in assessment refers to making the assessment process and criteria clear and understandable to learners.

*The teacher should:*

- Make learners aware of the demands of the assessment tasks.
- Share performance criteria and indicate what will constitute the pass mark.

- Readily share assessment results with the appropriate stakeholders (learners, parents/ guidance, teachers).
- Provide an opportunity for learners to seek review and redress.
- Share the learning outcomes of the assessment is designed to measure with learners.
- Be ready to share assessment criteria or rubrics when the need arises.

## 2.5 Inclusivity

Inclusivity in assessment will allow teachers to create assessment practices that are fair and accessible to ALL learners (GESI, SEL and SEN).

*The teacher should:*

- Familiarise with the section on inclusivity in the national pre-tertiary learning and assessment framework (NPLAF, page 32).
- Select assessment strategies that are appropriate for different learning needs.
- Assign workload in connection with the developmental and learning needs of learners.
- Work with special education experts in the school system to adapt and accommodate assessment to the needs of all learners (i.e. extra time, alternative formats or other necessary accommodations should be available).
- Make use of different formats (braille, oral translation, text-to-speech, AI, sign language interpretation and other assistive technology forms).
- Develop rubrics that are inclusive (taking into consideration grammar, vocabulary, handwriting and presentation of ideas).

## 2.6 Practicability

For assessment strategies or processes to be feasible, convenient, efficient and successful.

*The teacher should:*

- Ensure that appropriate and adequate assessment materials, resources and security are available.
- Consider the appropriate assessment format to match the learning outcome(s), class size, age and ability levels.
- Consider the time available to develop, administer, score and give constructive feedback.

## 2.7 Assessment Utility (Utilisation and Benefits)

*To enhance the usefulness and practical value of assessment tasks/activities, the teacher should:*

- Clearly state the intended use of the assessment results.
- Identify the essential learning outcome(s) to be covered in the assessment.
- Construct assessment tasks/activities that are well aligned to real-life situations.
- Select and allocate the appropriate resources for the assessment activities.

- Provide constructive feedback to learners on their performances.
- Provide credible information that is useful to learners and other stakeholders (teachers, parents/guardians).
- Weigh and indicate the benefits and the cost of the assessment strategies to be used.
- Justify the selection of a particular assessment format over others ( objective type, essay, project, portfolio, demonstration etc.).



# FORMS OF ASSESSMENT

The National Pre-Tertiary Learning Assessment Framework (NPLAF), the Senior High School Curriculum and the Secondary Education Assessment Framework (SEAF) prescribe various forms of assessment to be used by SHS/SHTS, STEM teachers and other stakeholders in gathering information about learners' learning, understanding and proficiency in a learning area.

This section, therefore, seeks to guide the assessment strategies to be used by teachers and learners, taking into consideration what to assess, how to assess, when to assess and who to assess.

## 3.1 Forms of Assessment

1. Formative (Assessment for- and as-learning)
2. Diagnostic
3. Summative (Assessment of-learning)
4. Performance-Based/Practical/Authentic Assessments
5. e-Assessments

## 3.2 Formative Assessment

Formative assessment (assessment for- (AfL) and as-learning (AaL) is used formally and informally to gather information about learners and their learning needs to enable teachers to modify or improve teaching and learning. It also helps the teacher to appropriately use resources during the learning activity, in the next learning experience or sequencing of learning activities. It also helps the learners to determine what they have learned and what to learn next.

### 3.2.1 Examples of formative assessment strategies used in the Curriculum

1. Observations during in-class activities (including non-verbal feedback).
2. Take-home assessment (homework, trial test etc.).
3. Reflection journals that are reviewed periodically during the term.
4. Concept maps.
5. Question and answer sessions (formal and informal).
6. In-class activities and presentations (both individual and group).
7. Self- and Peer-assessment.
8. Project and research.
9. Teacher-learner conferences.
10. Seminars to discuss research/project reports.

11. Portfolios/works in progress.
12. Field trips.
13. Inventories and questionnaires/surveys.
14. Impromptu/Unannounced quizzes.
15. Checklist/Rating scales/Rubrics.
16. Practical/performance assessment.
17. Open-book/Open-source assessments.
18. Case studies.
19. Exit cards.
20. Flow chart.

### 3.2.2 When and how to use formative assessment strategies

Formative assessment strategies are used during the teaching and learning processes and at the end of the teaching if the information is to inform or improve subsequent learning.

*Teachers and learners use formative assessment strategies to:*

1. Monitor learners' understanding, misconceptions and reinforce concepts.
2. Monitor learner motivation and ensure learner engagement.
3. Adjust teaching and learning strategies to learners' needs in real-time.
4. Give constructive feedback to learners.
5. Give useful feedback to teachers on learners' learning experiences.
6. Provide opportunities for learners to reflect on their learning and that of their peers.

***Examples of formative assessment strategies and how to use them during teaching and learning:***

1. **Think-Pair-Share:** Allows learners to reflect individually on a question or concept, then discuss it with a peer and share their thoughts with the entire class. This strategy promotes peer-to-peer learning and allows for the assessment of individual understanding.
2. **Question and answer sessions (formal and informal):** Use question and answer sessions for learners to engage in an interactive dialogue with the teacher or their peers to clarify understanding or seek additional information.
3. **Classroom Discussions:** Engage learners in meaningful discussions to enable the teacher to gauge learners' understanding, clarify misconceptions and encourage critical thinking.
4. **Observations:** Observe learners during class activities, discussions or group work to assess their understanding, participation and level of engagement during teaching and learning.
5. **In-class activities and presentations (both individual and group):** In a class activity, learners can actively participate in hands-on tasks or group work to apply and

reinforce the concepts taught in teaching and learning. Learners showcase their learning through a well-prepared and structured display of knowledge or skills, often accompanied by visuals or demonstrations.

6. **Self- and Peer-assessment:** Teachers can guide learners to do self and peer assessment by evaluating their work or providing feedback to their classmates, thereby promoting metacognition, reflection and the development of critical evaluation skills.

Teachers should use formative assessment strategies after lessons to help them evaluate learners' learning outcomes, identify areas for improvement and inform the next sequence of lessons. These provide valuable insights into learners' progress and guide instructional decisions. Examples of formative assessment strategies you can use after teaching and learning include:

1. **Quizzes and Tests:** Teachers can give short quizzes that evaluate learners' understanding of specific content or skills covered in the teaching and learning processes. You can use the results to provide targeted feedback and identify areas where additional support is needed.
2. **Homework and Assignments:** Give learners tasks to take away and submit after a few days or during the next lesson. Reviewing learners' completed homework or assignments provides insights into their understanding and allows teachers to provide feedback for improvement.
3. **Graphic Organisers:** Teachers can ask learners to organise their thoughts or concepts using visual tools such as concept maps, venn diagrams or flowcharts. You can assess their understanding by reviewing the completed graphic organisers.
4. **Peer-Assessment:** Allow learners to provide feedback and assess their peers' work against specified criteria. This promotes self-reflection and allows learners to develop evaluative skills.
5. **Projects:** Get individual or group of learners involved in working on a meaningful and comprehensive task or assignment that allows them to apply their knowledge and skills, fostering critical thinking and creativity, while providing opportunities for feedback.
6. **Exit Cards:** Learners can answer a few questions or provide short written responses during the lesson to demonstrate their understanding of the key concepts covered.

### 3.2.3 Who conducts formative assessment?

Formative assessment, being an integral part of the teaching and learning processes, is the role of the teacher and the learners. However, other external stakeholders such as WAEC, NaCCA, GES and NaSIA may be interested in formative assessment results and information.

### 3.2.4 Role of the teacher and the learner in formative assessment

#### The Teacher

*When using formative assessment, the teacher should:*

- Clearly state the learning outcome(s) to be assessed.

- Select an appropriate assessment strategy to measure the learning outcome(s) or learners' behaviours (character qualities, 21st-century skills and competencies and national values).
- Identify individual learner's strengths and areas for improvement in terms of the content (consider GESI, SEL, SEN).
- Adapt multiple assessment strategies to the varied needs of learners (consider GESI, SEL, SEN).
- Ensure that the assessment strategy(s) align with the learning and the assessment plan.
- Constantly monitor learner performance and learning progress (e.g., questioning, observing, interviewing).
- Guide learners to develop feedback to self or self-monitoring mechanisms to question their thinking.
- Guide learners to develop how to use or respond to feedback to improve learning.
- Use assessment information to modify teaching and learning strategies and resources.

### **The learner**

*When using formative assessment, the learner should:*

- Ask questions for clarification and understanding of the subject content.
- Use the feedback or information from the formative assessment to reflect on their learning and track their progress.
- Understand what is required of them to achieve the intended learning outcome(s).
- Identify and reflect on their strengths and areas that need improvement.
- Adapt their learning strategies to improve their skills, abilities and competencies.

## **3.3 Diagnostic Assessment**

Teachers also use diagnostic assessment for formative purposes to help gather information about the learner's prior knowledge, current skills, abilities and competencies and identify learning gaps in a learning area to inform teaching and learning.

### **3.2.1 Examples of diagnostic assessment strategies:**

1. Observation schedules
2. Interviews (individual or group)
3. Concept mapping
4. Group discussions
5. Question and answer
6. Learner survey
7. Pre-tests
8. Teacher-learner conferences
9. Short quizzes

10. Know-What-Learn(K-W-L)
11. Posters/Discussion board responses on content-specific prompts
12. Presentations
13. Technology-based assessment (online)
14. Entry tickets/ cards
15. Self-assessment to identify skills and competencies
16. Out-of-level assessments (asking lower or higher grade-level questions)
17. Think-aloud protocols
18. Conversations and dialogues

### 3.2.2 When and how to use diagnostic assessment strategies

*The teacher should:*

- Use diagnostic assessments prior or at the beginning of the teaching and learning process.
- Use it to identify learners with diverse needs (For example, if your class consists of learners with varying levels of prior knowledge or skills, diagnostic assessment can help you to differentiate teaching and learning processes to meet their varied learning needs).
- Administer diagnostics assessment to learners before they come to class or at the beginning of the teaching and learning process.
- Tell learners the content and expected learning outcome(s) for the next teaching and learning process to help in the diagnostic assessment.

*The learner should:*

- Reflect on the feedback from the diagnostic assessment and make a decision.
- Collaborate with their peers to improve their learning.
- Be ready to seek and accept support to close the learning gap.
- Engage in discussion and ask questions during the diagnostic process.
- Set goals for the learning and prepare adequately before teaching and learning.

#### **Examples of diagnostic assessment strategies and how teachers can use them are:**

1. *Concept Mapping:* Teachers can ask learners to create concept maps or diagrams to represent their understanding of the subject content before teaching and learning begin. This visual representation can reveal their existing mental frameworks.
2. *Entry Tickets/Cards:* Use short quizzes or questions at the beginning or end of a lesson to assess prior knowledge and what was learned during the lesson.
3. *Short Quizzes:* Give short quizzes that evaluate learners' understanding of specific topics or skills covered in a lesson. Teachers can use the results to provide targeted feedback and identify areas where additional instruction is needed.

4. *Presentations*: Allow learners to do short presentations on what they know before discussing a particular topic in class. This helps to assess skills such as information clarity, organization, and audience engagement, offering insights into learners' understanding, critical thinking and communication proficiency.
5. *Know-What-Learn (K-W-L)*: Encourage learners to list what they know, what they want to know and what they want to learn about a topic.
6. *Interviews*: Conduct one-on-one or small group interviews with learners to assess their understanding or perspectives of concepts or an issue.

### 3.4 Differentiated Assessment

Differentiated assessment adapts strategies to the diverse learning needs, strengths and interests of all learners. Teachers tailor assessments to accommodate varying levels of readiness, learning styles, and preferences that ensure that all learners have equitable opportunities to demonstrate their understanding and skills.

**To implement differentiated assessment, teachers should consider the following:**

1. *Varied assessment formats*: provide a range of assessment options such as written assignments, oral presentations, projects or multimedia presentations. This allows learners to exhibit their knowledge and skills using formats that align with their abilities and strengths.
2. *Flexible deadlines*: allow learners to complete assessments within a flexible timeframe. This considers different learning paces and allows learners to manage their time appropriately.
3. *Varying tasks*: Vary levels of difficulty for assessment tasks, allowing learners to choose the one that best suits their needs and challenges them appropriately.
4. *Accommodations*: Provide necessary accommodations for learners with unique learning needs, such as extended time, modified formats or additional resources to support their assessment process.
5. *Individualised feedback*: Provide individualised and constructive feedback that addresses the learner-specific needs and areas for improvement. Tailoring feedback to specific standards and learning outcomes can help learners understand their strengths and areas for improvement.
6. *Learner involvement*: Involve learners in the assessment process by encouraging self-reflection, self-assessment and goal setting. Engaging learners in dialogue about their learning and assessment promotes ownership and metacognition (reflecting on thought processes).

### 3.5 Summative Assessment

Summative assessment (Assessment of-Learning, AoL) is a formal and planned assessment to gather information on learners' overall learning achievements at the end of teaching and learning or term or year. It provides a summary of the learner's overall achievement for selection, certification and placement purposes.

### 3.5.1 Examples of summative assessment strategies

1. Class test (written, oral, aural and/or practical).
2. End-of-term/semester examinations.
3. End-of-year examinations.
4. End-of-programme examinations.
5. Test of practical.
6. Term paper.
7. Project.
8. Research reports/Project work.
9. Portfolios.
10. Performance/practical assessment.
11. Practicum/ Industrial attachment/Internship assessment.

### 3.5.2 When and how to use summative assessment strategies

The teacher, school or an external body conducts this type of assessment at the end- of teaching and learning, -term/semester, -year or -programme.

- *Project:* Assign a comprehensive project that requires learners to apply their knowledge and skills to a real-world scenario or problem. These projects often entail the creation of a product, presentation, or research paper that demonstrates learners' depth of understanding, critical thinking and problem-solving competencies.
- *Presentations:* Assign learners' themes or real-life problems related to the learning outcome(s) to research and present their learning or research findings to the class or an audience. These presentations demonstrate learners' ability to communicate, analyze and effectively convey their knowledge and understanding of the given themes/ issues/problems.
- *Performance/Practical Assessments:* learners should be asked to demonstrate skills or competencies in a real or simulated context. Learners should be tasked to demonstrate a musical or dramatic performance, poetry recital, set up an experiment, demonstrate a physical education activity or dismantle or assemble equipment.
- *Portfolios:* Learners should be asked to compile samples of their work or artefacts demonstrating their progress and achievement over the learning period (a term, a year or an entire programme). This should provide a holistic view of learners' skills, competencies and abilities acquired.
- *Practical Assessment:* Learners should be asked to apply theoretical knowledge in real life situations in subjects such as the sciences, technical and vocational and art and design. These assessments typically involve tasks or activities that measure learners' practical skills, competencies, problem-solving abilities and application of concepts in real-life contexts.

### 3.5.3 Use of summative assessment for formative purposes

Summative assessment results can sometimes be used for formative purposes. For example, the results from assessment(s) given at the end of a teaching and learning or school term/year may reveal learning gaps to guide remediation. Therefore, the teacher should use the results to inform learning planning for the next activities.

Another instance is where, instead of scoring a summative test, the teacher gives back the test to learners to discuss in groups to find answers to the questions that were wrongly answered. Alternatively, the teacher can present the questions that were wrongly answered during a plenary session for learners to reflect on and correct their wrong answers. By using these strategies, a summative assessment becomes an opportunity for learners to improve their learning.

### 3.5.4 Use of formative assessment for summative purposes

Formative assessment should be used to identify what the learner knows (strengths and areas for improvement) at a particular point in time. However, formative assessment could be used as a gauge of learners' overall achievement. For example, the teacher can grade learners' class exercises as part of a continuous assessment.

Outcomes of projects and portfolios where clear rubrics are developed and applied can contribute to the learner's end-of-year grading.

### 3.5.5 Who conducts summative assessment?

Summative assessment is mainly conducted by the school and external examination bodies such as WAEC. However, in both cases, teachers play a vital role in contributing to the development of items and tasks in line with the prescribed learning outcomes in the curriculum.

## 4.1 Performance-Based/Practical/Authentic Assessment

These assessments provide opportunities for learners to demonstrate their skills, abilities and competencies in natural or real-life situations. The teacher should use these forms of assessment to determine how well a learner can apply knowledge or principles or demonstrate what they can do, often in real-life situations. It can also be used to demonstrate an understanding of knowledge, skills, competencies, attitudes, values and character qualities in a natural or real-life context.

### 4.1.1 Examples of performance-based/practical/authentic assessment strategies

1. Exhibitions/Fairs/ Shows
2. Experiments
3. Essays (composing stories, drama, poems, articles, project reports, etc.)
4. Seminars/Discussions/Debates
5. Reflective Journals



6. Demonstrations
7. Presentations
8. Performances
9. Oral/Aural Assessments
10. Projects
11. Simulation
12. Fieldwork/Fieldwork reports
13. Research reports

#### 4.1.2 When and how to use performance-based/practical/authentic assessments

Performance-based/practical/authentic assessments should be used for both formative and summative purposes.

**Exhibitions/Fairs/Shows:** Teachers should use exhibitions/fairs/shows for learners to showcase their projects, artefacts and work, allowing them to demonstrate their learning and receive feedback from a broader audience. For example, a Robotics teacher can organise a STEM fair where learners exhibit their ability to dismantle and assemble robots for the school community.

**Experiment:** Teachers should provide opportunities for learners to demonstrate their practical knowledge, skills and competencies during the learning process. For example, in a chemistry class, teachers should set up practical activities where learners investigate the properties of different substances and analyse their findings.

**Essays:** Teachers should use essays to assess learners' application of knowledge and understanding of a subject matter to compose or communicate ideas. For example, learners use literary devices to critique a novel, looking at themes, characters and symbolism.

The teacher should use essays to assess critical thinking, research report writing skills and the ability to articulate ideas in written form.

**Reflective journals:** Teachers should ask learners to keep reflective notes on various themes to encourage self-reflection and demonstrate self-correction skills. For instance, in an economics class, learners should keep reflective journals where they record their thoughts and insights on various economic principles and their application in real-life situations.

**Simulation:** The teacher should use simulations to provide learners to experience

real-life situations in a modelled context. These experiences allow learners to understand and apply their knowledge to improve learning and for decision-making. For example, a history teacher might organise a simulation of a historical event or a model United Nations debate, where learners take on different roles and work through challenges.

**Fieldwork/fieldwork report:** Teachers should ask learners to write field reports to document observations and analyses from conducting research or fieldwork. For instance, in a biology class, learners could visit a local ecosystem and write a field report detailing their observations, species identification and ecological analysis.

**Performance Assessment:** Teachers should provide opportunities for learners to demonstrate their skills, abilities and competencies in real-life contexts. For example, the teacher can use drama, play, poetry recital or musical performances to assess learners' skills in expressive arts.

#### 4.1.3 Who conducts performance-based/practical/authentic assessment?

In performance-based and practical-based assessments, teachers typically conduct the assessment as they have the expertise to evaluate learners' performance and practical skills. However, it is important to note that, in certain cases, external assessors or professionals from relevant fields may also be involved in assessing learners' performance. For example, guest panels at a science or STEM fair or industry professionals in a technical training programme.

#### 4.1.4 The role of the teacher in performance-based/practical/authentic assessment

*In using performance-based/practical/authentic assessment the teacher should:*

- Design assessment tasks that require real-life application of knowledge, skills and competencies (authentic).
- Provide resources, guidance and support to learners as they engage in practical performance.
- Evaluate the learners' performance or practical work against predetermined criteria.
- Provide constructive feedback, identify areas of strength and improvement and assign grades or scores where necessary.
- Serve as a coach or mentor to learners, offering guidance and assistance throughout the performance or practical activities.
- Provide clear instructions, model skills and competencies expected to help learners develop strategies for improvement.

#### 4.1.5 The role of learners in performance-based/practical-based assessment

*While engaging in performance-based/practical-based assessment learners should:*

- Actively engage in performances or practical activities, applying their knowledge, skills, and abilities in real-life contexts (authentic).
- Reflect on their performances or practical works, analysing their strengths and areas for improvement.
- Use feedback provided by teachers or assessors to improve their skills and enhance their understanding.

- Take responsibility for their learning by setting goals, seeking clarification and self-assess, particularly when engaged in performances or practical activities.
- Collaborate with peers, seeking feedback and support during performances or practical tasks. They should engage in discussions, share ideas and learn from each other's experiences.

## 5.1 e-Assessment

e-Assessment broadly refers to the use of information technology and digital tools to assess learners' achievement. Teachers should use technology and digital tools to enhance the design and development; administration and scoring; analyses and interpretation; reporting and management of assessment results. It can be used for both formative and summative assessment.

### Benefits of using e-Assessment

1. It provides real-time information to support assessment for- and as-learning practices.
2. Learners get immediate feedback from assessment tasks, homework, and assignments.
3. Teachers can monitor learner performance and share information about learning progress with specific learners and their parents more effectively by using assessment data.
4. It allows teachers to adapt flexible assessment strategies. Teachers may monitor each learner's progress, determine their strengths and areas of need for early intervention and to improve learning.

#### 5.1.1 Examples of e-assessment strategies

1. Online Quizzes and Tests
2. Digital Portfolios
3. Simulations and Virtual/Remote Labs experiments
4. Discussion Boards and Blogs
5. e-Open-book assessment
6. Multimedia Projects
7. Learning Analytics
8. Digital Rubrics

#### 5.1.2 When and how to use e-assessment

*Teachers should use e-assessment for both formative and summative purposes in the following ways:*

1. *Online Quizzes, Surveys and Tests:* Create and deliver quizzes, surveys and tests through learning management systems (LMS) or dedicated online assessment platforms such as Zoom, Google Meet, Google Classroom, Edmodo etc. These tools

often allow for automatic grading and immediate feedback to learners. Use digital formative assessment tools like Kahoot, Socrative, Google Form, quizlets, seesaw, polls etc. These can be used to engage learners in real-time assessment to gauge learners understanding.

2. *Digital Portfolios*: Task learners to create digital portfolios by compiling and showcasing samples of their works, projects, and reflections over time. This provides a holistic view of their progress.
3. *Peer Assessment Tools*: Utilise online platforms such as WhatsApp, Google Drive etc., that enable learners to peer assess each other's work and provide feedback. This strategy promotes critical thinking and peer learning.
4. *Simulations and Virtual Labs*: Integrate interactive simulations or virtual laboratory experiences to assess practical skills and problem-solving abilities in subjects like science, engineering, visual arts etc.
5. *Discussion Boards and Blogs*: Assess participation, critical thinking, and written communication skills by evaluating learners' contributions to online discussion forums or blogs. For example, class WhatsApp or Telegram pages.
6. *e-Open-book Exams*: Design assessments that encourage learners to use digital resources during the exam. This shifts the focus from rote memorization to problem-solving and critical thinking.
7. *Multimedia Projects*: Assign multimedia projects where learners create videos, presentations, or websites. Assess their content, creativity, and digital communication skills.
8. *Learning Analytics*: Analyse data from digital assessments to gain insights into learner performance and learning trends. This can help modify teaching and learning processes to meet learners' needs.
9. *Digital Rubrics*: Provide learners with clear, digital rubrics that outline assessment criteria and expectations. This promotes transparency in assessment.

### 5.1.3 Who conducts e-assessment?

In e-Assessment, teachers typically conduct the assessment, as they have the expertise to evaluate learners' performance and practical skills. However, it is important to note that in some cases, teachers need IT personnel to support them.

### 5.1.4 The role of the teacher and the learner in e-assessment

*In conducting e-assessment, teachers should:*

- Select virtual platforms they are conversant with and are user-friendly for learners.
- Provide adequate guidance and instructions on how to access, complete and submit tasks.
- Make provision for learners with SEN who may require extra support to enable them to use the platform (i.e., providing extra time in completing tasks).
- Provide feedback on learners' performance in good time.
- Use data generated through e-Assessment to modify assessment processes and develop targeted interventions.
- Ensure the integrity, security and ethical use of e-Assessment platforms to prevent cheating and cyberbullying.

### 5.1.5 The role of the learner in e-assessment

*In conducting e-assessment, learners are expected to:*

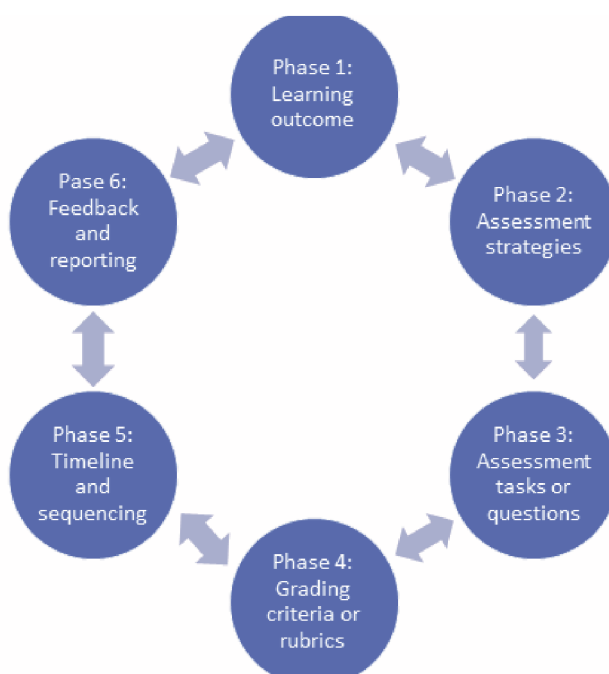
- Adhere to all instructions and standards regarding the use of the platform.
- Manage time effectively to ensure timely submissions of tasks.
- Actively participate in e-Assessment activities for teachers to determine whether the e-Assessment platforms are learner-friendly.
- Seek technical support or help when struggling with the use of the platform.
- Use feedback from the teacher to identify areas of learning needs.

# DEVELOPING A COMPREHENSIVE ASSESSMENT PLAN (CREATING ASSESSMENT PLANS)

## 6.1 Comprehensive Assessment Plan

An assessment plan is a detailed outline or blueprint that guides the process of assessing learners' learning and progress. It outlines the goals and objectives of the assessment, the learning outcome to be assessed, the strategies and tools to be used, the criteria for evaluating performance and the timeline for conducting assessments. The purpose of an assessment plan is to ensure that assessments are aligned with desired learning outcomes (valid), are fair and reliable and provide meaningful feedback to learners and teachers.

## 6.2 Assessment Plan Model



***An assessment plan typically includes the following components:***

1. *Learning Outcome:* Clearly defined statements describing what learners should know, understand or be able to do by the end of a specific teaching and learning process.
2. *Assessment Strategies:* Specific ways to evaluate learners' learning include written tests, quizzes, projects, presentations, portfolios, observations or other assessment forms.
3. *Assessment Tasks or Questions:* These are the specific tasks, questions or prompts that learners complete to demonstrate their understanding and skills related to the learning outcomes.
4. *Grading Criteria or Rubrics:* Established criteria or rubrics outlining expectations and standards for evaluating learners' performance, including different achievement levels for consistency in grading.

5. *Timeline and Sequencing*: The schedule for assessments, both formative (ongoing during instruction) and summative (at the end of teaching and learning) and how they are sequenced throughout the teaching and learning period.
6. *Feedback and Reporting*: Procedures for providing feedback and reporting assessment results to learners and stakeholders may include individual feedback, class-wide feedback, and reporting mechanisms like grade books or progress reports.

# DESIGNING ASSESSMENT STRATEGIES AND TASKS

## 7.1 Portfolio Assessment Strategy

### Description

A portfolio assessment is an evaluative tool to measure learners' understanding in a comprehensive manner, looking at the overall progress instead of individual marks from tests and quizzes.

### Purpose

A portfolio assessment is used to establish various cognitive achievements, as well as practical competencies. Portfolio assessment could be used for the different levels of Depth of Knowledge (Levels 1 – 4). It helps teachers identify areas where the learner may need additional support or resources to improve learning and provide a wide variety of learners' mastery of a particular standard and growth over a defined period.

### Types of portfolio assessments

A portfolio is a systematic collection of learners' work that represents learner's activities, actions and achievements over a specific period in one or more areas of the curriculum. There are three main types of portfolios:

1. Assessment Portfolios
2. Teaching and Learning or Working portfolios
3. Showcase portfolios

### Assessment portfolios

Assessment portfolios, also known as evaluative portfolios, contain work that has been evaluated according to set standards or criteria. These portfolios demonstrate a learner's ability to meet specific learning standards. They often contain rubrics, test results, learner reflections, teacher's notes and graded assignments. For instance, in a Science class, an assessment portfolio may contain lab reports, results from class tests, assessed projects and the learner's reflection on their learning throughout the term/semester/year.

### Teaching and learning or working portfolios

Teaching and learning or working portfolios are formative. They allow a learner to demonstrate his or her ability to perform a particular skill. For example, a working portfolio may include a collection of lab reports during a semester (term) that highlight a learner's improving ability to create hypotheses.

### Showcase portfolios

Showcase portfolios are summative. They include samples of a learner's best work to demonstrate mastery at the end of a unit of study, semester or school year. The showcase portfolio allows the learner to select their most outstanding work, hence demonstrating their highest level of learning and achievement. It can contain final drafts of assignments, projects or any piece of work that the learner is particularly proud of, demonstrating the learner's mastery of the relevant skills.



The purpose of a showcase portfolio is to provide a sense of accomplishment and to display one's best abilities. An example might be a portfolio of an art learner, presenting their best paintings or sketches.

What is in a Portfolio?

*A portfolio contains the following:*

1. Completed assignments and evaluations (e.g., Self-Assessment, Peer- Assessment)
2. Journal writings (daily report – Date, Time and Activities)
3. Reflections on discussions
4. Photos, sketches and other visuals
5. A summary statement made at different points regarding what has been learned/ achieved.

### **Setting**

*The portfolio assessment strategy can be used in the following settings:*

- Project-Based Learning
- Independent Study and Research Projects
- Classroom-based assessment
- Field Work
- Exhibitions/ Fairs
- Problem-based Learning
- Laboratory environment
- Studio
- Resource centres

For all approaches, the portfolio must demonstrate clear and close adherence to specific learning outcomes in the curriculum.

### **Steps**

#### ***Before***

*The Teacher should:*

- Determine the purpose of the portfolio. Decide how the results of a portfolio evaluation will be used to inform the subject.
- Identify the learning outcomes the portfolio will address.
- Decide what learners will include in their portfolio. Portfolios can contain a range of items—plans, reports, essays, resumes, checklists, self-assessments, references from employers or supervisors, and audio and video clips. Limit the portfolio to 3-4 pieces of learner's work and one reflective essay/memo.
- Identify or develop the scoring criteria (e.g., a rubric) to judge the quality of the portfolio.

- Establish standards of performance and examples (e.g., examples of a high, medium, and low-scoring portfolio).
- Create learner instructions that specify how learners collect, select, reflect, format and submit.
- It is the teacher's responsibility to help learners by explicitly tying subject assignments to portfolio requirements.

### ***During***

*The learner should:*

- Collect evidence related to the outcomes being assessed.
- Select the best and appropriate evidence and label each piece of evidence according to the learning outcome being demonstrated.
- Be guided on how to write a one or two-page reflective essay/memo that explains why they selected the examples, how the pieces demonstrate their achievement of the programme outcomes and/or how their knowledge/ability/attitude changed.
- Be guided on how to format requirements (e.g., type of binder, font and style guide requirements, online submission requirements).
- Be given submission (and pickup) dates and instructions.

### ***After***

*The teacher should:*

- Clearly establish the criteria for evaluating/scoring in a consistent manner
- Mark and record learners' performances
- Reflect on the activity and learner performances
- Provide constructive feedback to the learner
- Identify learners with SEN who may need extra support

*The learner should:*

- Reflect on the feedback received
- Revise their work for final submission

### **Time frame**

Deciding on a time frame for Portfolio assessment depends on and includes the following:

- Nature of project/problem or assignment
- Class size
- Resources

However, based on the learning outcome(s) the appropriate time frame for this portfolio is a week for minor activity and a term for extended projects, especially in Art and Design or Performing Arts.

**Form**

- Individual learner's portfolios when the class size is relatively small.
- Group portfolio when the size is relatively large.
- Whole class/ school

**Cross-cutting issues are to be considered in this portfolio assessment**

The teacher should take note of the following soft skills in assessing this portfolio.

21st Century Skills and Competencies	GESI and SEL	National values
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Creativity and innovation</li> <li>• Analytic skills</li> <li>• Active learning competencies</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and teamwork</li> <li>• Self-reflection and self-assessment</li> <li>• Adaptability and resilience</li> <li>• Cooperation</li> <li>• Self-esteem/Self-discipline</li> </ul>	<ul style="list-style-type: none"> <li>• Time management skills</li> <li>• Tolerance</li> <li>• Respect</li> <li>• Equity</li> <li>• Truth and integrity</li> <li>• Community</li> <li>• Honesty</li> <li>• Accountability</li> <li>• Responsibility</li> <li>• Appreciation</li> <li>• Stewardship</li> </ul>

## 7.2 Case Study as an Assessment Strategy

**Description**

A case study can be used as an assessment or pedagogical strategy. Usually, it is used as an assessment strategy to examine a learner's ability to apply acquired knowledge, skills and experiences by carefully investigating a particular circumstance or scenario to provide solutions to real-life situations. Usually, it will have the following components:

- Theme
- Case description
- Study of the case
- Class discussions
- Conclusion and reflection

**Types of case studies**

1. Descriptive case studies: The teacher should ask learners to analyse and explain the key features and characteristics of the case.

2. Explanatory case studies: The teacher should ask learners to give detailed information on the case by identifying and explaining the factors that contributed to the situation.
3. Exploratory case reports: The teacher should ask learners to gather information, analyse data and draw conclusions about a topic where limited information is available
4. Cumulative case studies: The teacher should encourage learners to synthesise and integrate their learning across different subjects

**Note:** Any of these can be done individually or as a group depending on the class size. For large class sizes, a group of 3 to 5 members should be used.

### **Purpose**

The purpose of a case study is for learners to apply acquired knowledge, concepts and theories to solve real-life situations.

What should the teacher consider before using a case study as an assessment strategy?

- The complexity of the content standard
- The availability of resources
- Ability level of learners
- Time
- Class size

### **Steps**

To ensure a well-structured and quality case study, it is important for the teacher to consider the following:

#### **Before**

*The teacher should:*

- Clearly define the learning outcomes to be assessed.
- Identify appropriate issues or cases to be investigated.
- Determine the format of the case study (e.g., a written document, a multimedia presentation, a video or a combination of these), depending on the resources available.
- Inform the learner on what to do, time frame, and expectations.
- Provide materials (i.e., text, videos, pictures etc) for the case study discussion.
- Develop and provide a clear scoring rubric that outlines or defines quality work to learners.

#### **During**

*The teacher should:*

- Create and maintain a sound environment for the case study discussion.
- Bring the whole class together and invite each group to share their findings, solutions or recommendations.
- Ask open-ended questions on the issue of discussion to clarify any misconception.

- Incorporate peer assessment or peer grading as part of the process.

### **After**

*The teacher should:*

- Provide constructive feedback on learners' responses.
- Ask the learners to reflect on their learning process, such as what they learned, what they found difficult or what they would do differently.
- Summarise the main points and lessons learned from the case study and link them to the learning outcomes and content.

### **Ethical considerations**

In the use of a case study as an assessment strategy,

*The teacher should:*

- Discuss ethical considerations with learners, especially in cases that involve sensitive or potentially controversial topics (e.g. gender, cultural, social, emotional, political and religious issues) when selecting and discussing a case.

### **Documentation and record-keeping**

*The teacher should:*

- keep records of assessments and learners' submissions to maintain transparency and fairness (e.g. portfolio)

### **Cross-cutting issues to be considered in case study assessment Examples:**

- Problem-Solving Skills
- Analytical Thinking
- Decision-Making Abilities
- Communication Skills
- Leadership Skills
- Teamwork Skills
- Time Management
- Values (confidence, tolerance, respect)
- Digital literacy

## **7.3 Project-Based Assessment Strategy**

### **Description**

Project-based assessment is a learner-centred approach that assesses learners' knowledge and skills from the beginning to the completion of a project or product i.e. development of artefacts or ideas. This strategy promotes active learning, critical thinking, problem-solving and the application of knowledge in a real-world context.

## **Purpose**

*Some reasons for which teachers can use project-based assessment are to:*

1. Assess learners' ability to apply knowledge and skills in real-world situations.
2. Assess complex problem-solving skills as they often involve multiple tasks, research, analysis and creative solutions.
3. Enable learners to demonstrate specific skills or competencies such as research, communication, teamwork or creativity.
4. Promote integration of interdisciplinary knowledge and skills to bridge the gap between various subject areas to promote holistic learning.
5. Accommodate various learning styles and preferences of learners and allow them to choose how they approach the task.

## **Project Setting**

Project-based assessments are most effective in contexts or settings where they align with real-life situations and experiences. A teacher can use project-based assessment in the following settings:

- Classroom
- Fieldwork
- Laboratory and resource centres
- Community
- Workshops
- School farms/Garden
- Factories/Industries

## **Role of teachers and learners in project-based assessment**

*When assessing projects, teachers and learners work to:*

- Provide clear guidelines for developing the project and how to assess it.
- Design and plan the project that aligns with the learning outcomes.
- Ensure that learners are assigned to project groups and projects to individuals considering learners' background characteristics
- Provide necessary resources, materials and support to help learners succeed in their projects.
- Provide and use ongoing feedback and guidance to learners.
- Encourage collaboration and teamwork among learners by promoting peer-to-peer learning,
- Guide learners in reflecting on their project-based assessments and help them develop metacognitive skills

### Class size and time frame

As a teacher, depending on the number of learners in your class, individual or group project-based assessment can be used. However, teachers can create larger groups for complex projects, where different members can focus on specific aspects of the project.

The time frame for conducting a project-based assessment can vary depending on the complexity of the learning outcomes (skill to be achieved) a project may be:

- Short-term
- Medium-term
- Long-term

### Steps

- Define the learning outcomes
- Develop a topic or theme in line with learning outcomes
- Design the project and provide a project description in line with learning outcomes
- Define specific tasks to be undertaken in developing the project
- Create a timeline
- Select resources and materials needed
- Provide guidance and support for learners
- Develop clear assessment rubrics
- Provide feedback to guide revision

### Cross-cutting issues a teacher can consider in project-based assessment

*Teachers should take note of the following soft skills when assessing projects:*

21st Century Skills and Competencies	GESI and SEL	National values
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Creativity and innovation</li> <li>• Analytic skills</li> <li>• Leadership</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and teamwork</li> <li>• Self-reflection and self-assessment</li> <li>• Adaptability and resilience</li> </ul>	<ul style="list-style-type: none"> <li>• Time management skills</li> <li>• Tolerance</li> <li>• Respect</li> <li>• Equity</li> <li>• Truth and integrity</li> </ul>

## 7.4 Questioning as an Assessment Strategy

### Description

Questioning as an assessment strategy is the practice of engaging learners in an interactive dialogue or a series of carefully crafted questions to evaluate their understanding, knowledge, skills, and critical thinking abilities. Teachers can use questioning as an assessment strategy in all learning areas or subjects.

### Purpose

*Questioning as an assessment strategy can be used by the teacher to:*

- Identify learning gaps through the assessment of the level of comprehension, retention and application of knowledge and skills gained by learners in achieving a learning outcome of a given content.
- Actively engage learners in the teaching and learning process.
- Assess if a concept taught has been well grasped as learners' feedback provides valuable feedback to them and the teacher.
- Clarify concepts leading to deeper understanding or seek additional information in solving real-world or imaginary issues.
- Promote the acquisition of critical thinking and problem-solving skills.
- Encourage immediate or real-time feedback from learners leading to deeper thinking.
- Investigate misconceptions for clarification.
- Accommodate diverse learning styles to achieve a specific learning outcome.

### Types

The following are various types of questioning techniques based on the Depth of Knowledge (DoK) levels that the teacher can use in assessment:

1. **Closed-ended questions - DoK 1:** have a limited number of predetermined answers and are designed to gather specific information requiring "yes" or "no", "True or False"
2. **Open-ended Questions - DoK 2 and 3:** allow for a more detailed and comprehensive response that begins with words like "what," "why," or "how."
3. **Funnel Questions- DoK 2 and 3:** used to gradually narrow down a topic, starting with broader questions and proceeding to more specific ones. This technique helps gather information in a logical and structured manner.
4. **Probing Questions - DoK 2 and 3:** used to explore a topic in more detail or to gain deeper insights. They are often used to dig deeper into a previous response or to uncover hidden information,
5. **Leading Questions - DoK 2 and 3:** used to steer learners towards a particular answer or viewpoint. They may imply an expected or desired response.
6. **Hypothetical Questions- DoK 3 and 4:** These questions often involve speculative or creative thinking. They require learners to make connections, apply knowledge and think beyond the immediate context.



**Settings**

- Classroom
- Co-curricular activities e.g. School clubs and games
- Field trips/work, e.g., Factories/industries, school farms/gardens/ pantries(kitchen)
- Laboratory/Resource Centre
- Workshops/studios/theatres

**Time frame**

Teachers can use questioning in their daily teaching and learning activities. However, it should be used based on the learning outcome of the subject matter under consideration. It can specifically be used:

- Throughout the teaching and learning process (Formative Assessment): before, during and after the teaching of a lesson.
- Summatively, questioning can be used together with other forms of assessment such as oral/aural(listening) assessment at the end of a unit or content and programme.

**Class size**

- Individual, small group or whole class

**Steps**

In using questioning as an assessment strategy, the teacher and learner can employ the following steps:

**Before**

*The teacher should:*

- Define the Learning Outcomes to be achieved and develop key questions before class based on the outcomes.
- Select appropriate question type(s) that align with the content standard/ indicators to be taught and the DoK levels to be achieved. The questions to be asked should be clear, relevant, concise and free from ambiguity and biases.
- Design valid questions that will suit the type of questioning strategy to be used to achieve the learning outcomes.

**NB:** *Avoid or minimise the use of questions that will yield Yes/No or True/False responses but make more use of questions that allow for explanatory responses.*

- Plan question sequences and adapt questioning techniques to meet the diverse learning needs and abilities of their learners to promote active participation.

**During**

*The Teacher should:*

- Select the context and provide relevant information to give learners the basis for the questions.

- Vary the form of questions: those that gauge knowledge, require diagnosis, or challenge conclusions considering the learner's background characteristics to promote inclusivity.
- Ask one question at a time and wait for responses from learners to allow time to think through responses critically.
- Encourage active engagement of all learners.
- Monitor learners' performance and learning process to identify areas where learners may need additional support or clarification or to plan appropriate remediation where appropriate.
- Acknowledge all responses/answers-repeat so the class can hear and/or write them on the board.
- Provide constructive and timely feedback; teachers are advised to accommodate learners' varied responses as well as be fair and ethical.
- Use assessment data to modify their teaching techniques, strategies and resources.
- Move around the classroom or learning centre

*The learner should:*

- Ensure they gain an understanding of the learning outcomes and work towards achieving them through self and peer assessment.
- Actively participate in the questioning process by listening carefully to the questions, thinking critically about their responses, and providing thoughtful answers.
- Self and peer assess themselves using a questioning assessment strategy when learning to enable them to reflect on their learning.
- Own their learning by adapting strategies to improve their learning outcomes, skills and competencies.

**After**

*The teacher should:*

- Analyse responses
- Provide constructive feedback
- Modify teaching and learning processes
- Document assessment data
- Reflect and adapt questioning techniques, strategies and resources to check if expected learning outcomes have been achieved.
- Teachers and learners reflect on responses to check if expected learning outcomes have been achieved.

### Cross-cutting issues to be considered in using questioning as an assessment strategy

Teachers should take note of the following soft skills:

21st Century Skills and Competencies	GESI and SEL	National values	Differentiation
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Creativity and innovation</li> <li>• Analytic skills</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and teamwork</li> <li>• Self-reflection and self-assessment</li> <li>• Adaptability and resilience</li> <li>• Mixed gender group</li> </ul>	<ul style="list-style-type: none"> <li>• Time management skills</li> <li>• Tolerance</li> <li>• Respect</li> <li>• Equity</li> <li>• Truth and integrity</li> </ul>	<ul style="list-style-type: none"> <li>• Mixed ability/cultural groups</li> <li>• Adaptive questions</li> </ul>

## 7.5 The Test of Practical Knowledge (TPK) Assessment Strategy

### Description

This assessment is tailored to evaluate a learner's capacity to apply acquired knowledge in real-life situations by engaging in hands-on tasks or simulations that mirror real-world scenarios, assessing practical skills, problem-solving abilities and the application of practical knowledge theoretically. It aims to gauge how effectively learners can employ their knowledge to solve problems or accomplish tasks.

### Purposes

*The general purpose of the test of practical knowledge is to assess learners' ability to apply practical knowledge in theory to:*

- Evaluate their application-based understanding.
- Assess their problem-solving skills.
- Measure the learner's practical knowledge and its use in real-life situations.
- Provide insights into a learner's ability to transfer practical knowledge into theoretical actions.

### Setting

The Test of Practical Knowledge is conducted in environments that simulate real-life situations relevant to the learning outcome and the context being assessed. This could be a

- Classroom
- Laboratory
- Field
- School farms/gardens/community

- Technical workshops
- Science fair
- Virtual/Digital/Remote
- Outdoor spaces
- Workplace
- Team Project

**Class size**

The size of the class can vary based on resources and the nature of the practical tasks. It could be individuals, smaller groups or the whole class.

**Time frame**

The timing for assessing the Test of Practical Knowledge can range from a single session to multiple sessions, depending on the complexity of tasks and skills being assessed.

**Steps*****Before***

*The teacher should:*

- Provide clear instructions and resources needed for the tasks.
- Clarify any doubts about the assessment task.

*The learner should:*

- Seek clarification from the teacher or other relevant persons before starting the assessment.
- Familiarise themselves with theoretical concepts beforehand.

***During***

*The teacher should:*

- Encourage teamwork and effective communication if tasks involve group work.

*The learner should:*

- Focus on applying learned concepts to solve problems or complete tasks accurately within the given context.
- Manage time efficiently to complete tasks within allocated timeframes.

***After***

*The teacher should:*

- Encourage learners to reflect on their performance, review their work and identify areas for improvement.

### Cross-cutting issues to be considered in Test of Practical Knowledge assessment

Teachers should take note of the following soft skills in Practical Assessment.

21st Century Skills and Competencies	GESI and SEL	National values	Differentiation
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Creativity and innovation</li> <li>• Digital literacy</li> <li>• Collaboration</li> <li>• Hands-On Skills</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and teamwork</li> <li>• Self-reflection and self-assessment</li> <li>• Adaptability and resilience</li> </ul>	<ul style="list-style-type: none"> <li>• Time management skills</li> <li>• Tolerance</li> <li>• Respect</li> <li>• Equity</li> <li>• Truth and integrity</li> </ul>	<ul style="list-style-type: none"> <li>• Mixed Ability Groups</li> <li>• Adaptive instructions</li> </ul>

## 7.6 Performance Assessment Strategy

### Description

In its simplest terms, a performance assessment requires learners to demonstrate that they have mastered specific skills and competencies by performing or producing something. The task must be meaningful and engaging to learners. When learners perform tasks that are meaningful and engaging to them, they can take ownership of their learning and effectively work, either independently or in collaboration, depending on the requirement of the task. Performance assessment can be used as either a formative or summative tool.

### Purpose

The main purpose of this assessment strategy is to provide learners with the opportunity to demonstrate their knowledge and understanding of a concept and communicate that understanding through a performance task.

### Setting

Performance assessment can be used in the following settings:

- Classroom
- Laboratory/workshops
- Field
- Theatre

### Time Frame

Teachers should note that the learning outcome and learners' achievement expectations may inform the appropriate time frame for the use of performance assessment. However,

the designated time of completion of the assessment task should not be too short or too long.

### **Class Size**

Performance assessment works best for all forms of class size. Teachers should, however, be strategic in making learners work individually or in moderate/large groups depending on the unique situation.

### **Steps**

To develop and implement performance assessment, teachers should:

#### ***Before***

*The teacher should:*

- State the purpose of the assessment.
- Specify the learning outcome to be assessed using the performance assessment strategy.
- Make learners aware of whether they will work individually or as groups (e.g., groups of 2-5).
- Design a performance task which requires the learners to demonstrate the intended skills and knowledge required of them.
- Discuss with learners the rules of engagement which include the performance criteria that specify the extent to which learners have mastered the skills and knowledge.
- Discuss with learners the available resources to be used.

*The learner should:*

- Make ready the available resources that will help them perform the assessment task.
- Seek clarification on the performance task to be performed when necessary.

#### ***During***

*The teacher should:*

- Monitor and ensure the serenity of the environment for learners to work effectively as individuals or groups as in the case of a laboratory/field/workshop exercise.
- Guide learners to complete the assigned task(s) within the stipulated time.

*The learner should:*

- Design the artefact or the idea using the available resources.
- Should submit the performance product to the class at the stimulated time for evaluation.

#### ***After***

*The teacher should:*

- Collaborate with learners to evaluate the performance task(s) outcome.
- Communicate constructive feedback on the assessment to the learners.

- Provide information on how the assessment feedback would be used.

*The learner(s) should:*

- Should offer constructive feedback on their colleague's work.
- Self-reflect and make use of constructive feedback to shape his/her work.

### **Cross-cutting issues to be considered in the use of performance assessment**

*Teachers are to be mindful of the following cross-cutting issues and their accompanying soft skills when using gamified assessment:*

<b>21st Century Skills and Competencies</b>	<b>GESI and SEL</b>	<b>National values</b>
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Creativity and innovation</li> <li>• Analytic skills</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and teamwork</li> <li>• Self-reflection and self-assessment</li> <li>• Adaptability and resilience</li> </ul>	<ul style="list-style-type: none"> <li>• Time management skills</li> <li>• Tolerance</li> <li>• Respect</li> <li>• Equity</li> <li>• Truth and integrity</li> </ul>

## **7.7 Practical Assessments Strategy**

### **Description**

Practical assessment gauges a student's capacity to use their knowledge and abilities in practical and hands-on settings. It involves evaluating learners' ability to perform specific tasks and demonstrate practical skills. It includes laboratory experiments, simulations, demonstrations or projects.

The exact nature of the assessment will depend on the subject or area a teacher is interested in.

### **Purpose**

*The purpose of conducting a practical assessment is to:*

- Evaluate learners' proficiency, problem-solving capacity and aptitude for carrying out tasks.
- Create and deliver tests that ask learners to complete real-world assignments, experiments or demonstrations.

### **Setting**

*Teachers can use practical assessment in the following settings:*

1. Classroom
2. Laboratory
3. Field

4. School farms/gardens/community
5. Technical workshops
6. Science fair
7. Virtual/Digital/Remote
8. Co-curricular activities and clubs
9. Outdoor spaces
10. Workplace
11. Team project

### **Time Frame**

Based on the learning outcome and the skills to be acquired, a Practical assessment can be done in a week at the end of a term or year depending on the project.

### **Class size**

Class size suitable for practical assessment can be individual, group or whole class

### **Steps**

#### ***Before***

*Learners can understand the content and theory being used by;*

- Reviewing the theoretical concept
- Familiarising themselves with the concept under assessment

#### **Choosing experimental design**

*Learners are required to:*

- Design an experiment using the theoretical concept.
- Outline the stages/process for the experiment and formulate hypotheses.

#### **Gathering materials**

- Make a list of the tools and supplies you will need.
- Ensure that the necessary materials are available

#### ***During***

#### **Choosing experimental procedure**

*Learners are required to:*

- Describe the step-by-step process in detail including how to control extraneous factors, along with any safety precautions.

#### **Gathering and analysing data**

*With support from teachers, learners are required to:*

- Measure the dependent variable appropriately at various factor values to collect data.
- Analyse the data meaningfully.
- Sort, examine and derive conclusions from the data analysis



**After:****Display of findings**

- Give a concise visual summary of the results.
- Address any restrictions or mistakes.

**Reflection and improvement:**

- Consider your advantages and disadvantages.
- Improve the design of upcoming experiments.
- Throughout the process, place a strong emphasis on ethics, integrity and seeking advice as appropriate.
- Encourage a critical and inquisitive outlook on learning.

**Cross-cutting issues are to be considered in this test of practical assessment.**

*Teachers should take note of the following soft skills in Practical Assessment.*

21st Century Skills and Competencies	GESI and SEL	National values	Differentiation
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Creativity and innovation</li> <li>• Digital literacy</li> <li>• Collaboration</li> <li>• Hands-On Skills</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and teamwork</li> <li>• Self-reflection and self-assessment</li> <li>• Adaptability and resilience</li> </ul>	<ul style="list-style-type: none"> <li>• Time management skills</li> <li>• Tolerance</li> <li>• Respect</li> <li>• Equity</li> <li>• Truth and integrity</li> </ul>	<ul style="list-style-type: none"> <li>• Mixed Ability Groups</li> <li>• Adaptive instructions</li> </ul>

## 7.8 Computational Tasks as an Assessment Strategy

**Description**

A computational task as an assessment strategy refers to evaluating a learner's knowledge, skills, or abilities by asking them to perform specific calculations, solve problems or manipulate data using computational methods or tools. This method of assessment is frequently employed to assess a learner's skills and competencies in subjects like mathematics, physics, computer science, data analysis and other technical/STEM areas.

**Purpose**

Computational tasks as an assessment strategy aim to assess and develop learners' skills in problem-solving, critical thinking, practical application,

creativity and innovation. These tasks also serve to monitor learners' progress, prepare them for standardised testing, evaluate their readiness for future careers and foster the application of computational skills within research projects.

**Setting**

*Computational task as an assessment strategy is suitable in the following settings:*

- Classroom
- Field
- Laboratory

**Time frame**

The time frame for conducting computational tasks as an assessment strategy depends on the specific learning outcome and learning indicator and the desired frequency of feedback and evaluation. It can be done in the beginning, during the teaching and learning and at the end of the lesson.

**Class size**

The class sizes appropriate for using computational tasks can vary from individual to small groups.

**Steps*****Before***

*The teacher should:*

- Define learning outcome by clearly outlining the learning outcomes
- Create task and set criteria to develop the task, provide clear instructions, and establish assessment criteria or grading rubrics. Make sure you have all the necessary resources and materials prepared
- Communicate with learners: Share the assessment's purpose, criteria for evaluation, and guidelines with learners and address any concerns they might have.

*The learner should:*

- Understand the purpose of the assessment, criteria for evaluation and guidelines

***During***

*The teacher:*

- Administer and Supervise: Distribute the task to learners, closely monitor their progress and ensure a fair and cheating-free assessment environment (both teacher and learner roles).
- Assist and Manage the Time: Be available to address learners' questions, aid their comprehension of task requirements, and effectively manage the time to ensure completion within the designated timeframe (both teacher and learner role).

***After***

- Collect and Assess: Collect completed tasks and evaluate learners' work using predetermined criteria, assigning scores, and providing feedback (teacher role).
- Provide Feedback and Review: Offer learners feedback, share results, and emphasize both strengths and areas for improvement.
- Review the assessment's efficacy (both teacher and learner role).

### Cross-cutting issues to be considered in computational tasks

*The teacher should take note of some cross-cutting issues when using computational tasks as an assessment strategy.*

21st Century Skills and Competencies	GESI and SEL	National values	Differentiation
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Creativity and innovation</li> <li>• Analytic skills</li> <li>• Logical reasoning</li> <li>• Coding and programming skills, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and teamwork</li> <li>• Self-reflection and self-assessment</li> <li>• Adaptability and resilience, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Time management skills</li> <li>• Tolerance</li> <li>• Respect</li> <li>• Equity</li> <li>• Truth and integrity, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• mixed ability group</li> <li>• adaptive tasks</li> </ul>

## 7.9 Debate as an Assessment Strategy

### Description

Debate as an assessment strategy involves structured arguments and discussions to evaluate learners' knowledge and understanding of issues/ideas. It encourages research and articulation of views; it can be used for formative or summative assessments. Types of debates include formal debates with rules and roles and informal debates, which are more flexible.

### Purpose

Using debate as an assessment strategy offers a comprehensive evaluation of learner's ability to generate ideas based on their knowledge and understanding of concepts and confidence in supporting their ideas.

### Settings

- Classroom
- Performance spaces (e.g. dining hall, assembly hall, laboratory)
- Electronic platforms
- Music and drama theatre

### Class size

*Depending on the learning outcomes to be achieved debates can be organized in:*

- Small classes
- Large classes

**Time frame**

The teacher can conduct a debate within a single class session, it can also span over several class sessions or weeks.

**Steps****Before**

*The teacher should:*

- Select the appropriate motion/topic, ensuring it is relevant to the learning outcome
- Offer resources and materials to support learners
- Assign roles /create teams or pairings
- Establish rules and procedures

*The learner should:*

- Undertake research regarding the debate's topic or motion
- Play an active role as a team member (in team-based debates)

**During**

*The teacher should:*

- Host the debate
- Ensure effective time management
- Monitor and take notes

*The learner should:*

- Participate in the debate
- Listen and take notes
- Counter-argue when necessary

**After**

*The teacher should:*

- Facilitate a debriefing session (Teachers should use the debriefing sessions to address any misunderstandings or questions that come up from the debate. They should also highlight the key concepts and important lessons based on the learning outcome)
- Implement peer assessments.
- Organise follow-up activities as necessary.

*The learners should:*

- Reflect on their performance and the debate as a whole.
- Assess their peers' performances based on established criteria.

### Cross-cutting issues to be considered in debate as assessment strategy

The teacher should take note of the following soft skills in the use of debate as an assessment strategy

21st Century Skills and Competencies	GESI and SEL	National values
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Analytic skills</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and teamwork</li> <li>• Self-reflection and self-assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Time management skills</li> <li>• Tolerance</li> <li>• Respect</li> </ul>

## 7.10 Displays and Exhibitions as an Assessment Strategy

### Description

A display presents products/visuals to convey a message or highlight a subject, whereas an exhibition is an organised public presentation of final products or information in a designated space, often found in museums or galleries.

Displays and exhibitions as an assessment strategy allow learners to showcase their understanding and proficiency in a subject by exhibiting their final works/ products or ideas in a creative and practical format. This can be done either privately or publicly to show one's creative works or ideas.

### Purpose

*Displays and exhibitions as an assessment strategy can be used by the teacher to:*

- Demonstrate mastery of a unit/content by applying what has been learned in a practical context.
- Accommodate diverse learning styles (i.e., visual, auditory, and kinesthetic (practical) of learners as well as learners with special needs.
- Promote the acquisition of critical thinking, creativity, innovation, collaboration and communication skills.

### Settings

- Schools/Classrooms e.g. School Clubs, and canteens
- Art /Music studios
- Museums
- Online e.g., digital art, photography, video art and media
- Workshops/Laboratory/Resource Centre
- Community centres/hubs
- Fairs and festivals

**Time frame**

The time frame for conducting a display or exhibition assessment can vary depending on the complexity of the learning outcomes (skill to be achieved), resources and equipment available; it may be:

- Short-term (3-5 hours in a day)
- Medium-term (whole day)
- Long-term (a week)

**Class size**

As a teacher, depending on the number of learners in your class, individual or group displays and exhibitions can be used. However, teachers can also create larger groups for complex displays and exhibitions, where different members can focus on specific aspects.

**Steps*****Before***

*The teacher should:*

- Define learning outcomes to be achieved and make it known to learners.
- Select relevant and engaging activities which align with the learning outcomes.
- Gather necessary resources/materials and equipment that will support the chosen theme and enhance learning.
- Design the arrangement of products or exhibits by considering factors like venue (space), duration, visibility, accessibility and publicity.
- Develop assessment criteria with learners and set clear expectations.
- Assign roles and responsibilities so learners can perform their individual and/ or group responsibilities effectively with a focus on learners with special needs. e.g., a talented learner may be given a complex task/question/role while the untalented or slow learner may be assigned a less complex task/role.

*The learner should:*

- Understand the learning outcome by familiarising him/herself with what is expected to be learnt or achieved during the display or exhibition.
- Participate in the planning process by offering ideas, suggestions, or volunteering for specific tasks.
- Research and gather relevant information and resources related to the theme or topic of the display and exhibition to engage more meaningfully with the audience.
- Get all product(s)/idea(s) as well as venue and audience ready for the display or exhibition.

***During***

*The teacher should:*

- Facilitate the displays and exhibits assessment by engaging learners in discussions and interactive exercises.
- Use the assessment criteria to check learners' performance.

- Encourage questions and discussions to deepen understanding.
- Monitor engagement and participation as you observe learners' interaction with their peers and visitors.

*The learner should:*

- Engage actively based on the role assigned e.g. welcoming visitors/ audience to the venue and talking about products/ideas.
- Note down their observations and thoughts and ask questions to deepen understanding and improve their exhibits/products.

### **After**

*The teacher should:*

- Reflect and modify teaching and learning strategies, as well as resources and equipment to achieve learning outcomes.
- Encourage learners to share their thoughts and feedback and seek clarification from the teacher or peers.
- Provide constructive feedback to learners highlighting their strengths and areas for growth in their interaction with the displays.
- Supervise learners to clean up the venue and send appreciation messages to all sponsors and supporters.

*The learners should:*

- Reflect on the activity and give constructive feedback to check the effectiveness of the display or exhibition while the teacher guides them.
- Modify works/ artefacts/ideas/information displayed or exhibited to improve future assessments.

### **Cross-cutting issues to be considered in using displays and exhibitions as an assessment strategy**

*Teachers should take note of the following soft skills:*

<b>21st Century Skills and Competencies</b>	<b>GESI and SEL</b>	<b>National values</b>	<b>Differentiation</b>
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Creativity and innovation</li> <li>• Analytic skills</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and teamwork</li> <li>• Self-reflection and peer/ self-assessment</li> <li>• Adaptability and resilience</li> <li>• Interest</li> </ul>	<ul style="list-style-type: none"> <li>• Time management skills</li> <li>• Tolerance</li> <li>• Respect</li> <li>• Equity</li> <li>• Truth and integrity</li> <li>• Originality</li> </ul>	<ul style="list-style-type: none"> <li>• Mixed ability/ gender/ cultural groups</li> <li>• Adaptive learning</li> </ul>

## 7.11 Homework as an Assessment Strategy

Homework or assignments as an assessment strategy involve the use of structured tasks or projects that learners complete outside of regular class time to evaluate their understanding, knowledge and skills gained in a specific learning outcome. This assessment strategy can take various forms such as written assignments, projects, research papers, problem sets, essays or creative tasks.

Some concepts that can be assessed using homework/assignments include menu planning and recipe development, problem-solving exercises in mathematics, hands-on experiments and observations, creative writing assignments and art projects, map development and application of GIS in locating places.

### Purpose

The key purposes of using homework/assignment as an assessment strategy by the teacher include:

- Assessment of Understanding
- Application of Knowledge
- Reinforcement of Learning
- Independent Study
- Provision of valuable feedback
- Skill Development
- Assessment of Diverse Abilities

### Settings

- Classroom
- Fieldwork
- Online platforms
- Home

### Class size

*Depending on the intended learning outcomes, assignments/ homework can be structured for either:*

- Small class sizes
- Large class sizes

### Time frame

The time frame for conducting assignments can be adjusted based on the desired learning outcomes and the complexity of the task.

- Short-term Assignments (Daily or nightly homework and weekly assignments)
- Medium-term Assignments (Bi-weekly or monthly assignments)
- Long-term Assignments (Semester/ term-long assignments)



**Steps****Before***The teachers should:*

- Clearly define the learning outcomes intended to be achieved
- Design/ Create a well-structured assignment with clear instructions and expectations.
- Adapt to the needs of diverse learners, especially those with special needs
- Provide resources such as textbooks, online materials or reference materials to support learners in completing the assignment successfully.

**During***The teachers should:*

- Keep track of learners' progress on the assignment.
- Be available to answer questions and provide clarification during the assignment phase.
- Provide formative feedback and guidance to help students improve their work.
- Teach learners how to properly cite sources and use information ethically/ avoid plagiarism.

*The learner should:*

- Seek clarification about the task from teachers or peers where necessary
- Actively work on the homework, focusing on comprehension
- Manage their time effectively
- Learners can reach out to their parents/guardians, peers or online resources for guidance and clarification in responding to the tasks

**After***The teacher should:*

- Evaluate the completed assignments using clear and consistent grading criteria
- Analyse student performance to identify common strengths and areas for improvement.
- Discuss feedback with learners
- Reflect on the outcomes of the assignment.
- Share the results of the assignment with learners
- Acknowledge and celebrate learners' achievements to boost motivation and self-esteem.

*The learner should:*

- Review their work to identify errors or areas for improvement.
- Reflect on what they have learned
- Bring up questions that were confusing for class discussion.
- Use feedback to learn from their mistakes and improve performance.

### Cross cutting issues to be considered in homework as assessment strategy

Teachers should take note of the following soft skills in the use of homework/ assignment as an assessment strategy

21st Century Skills and Competencies	GESI and SEL	National values
<ul style="list-style-type: none"> <li>• Critical thinking and problem-solving skills</li> <li>• Creativity and innovation</li> <li>• Analytic skills</li> <li>• Strategy thinking</li> </ul>	<ul style="list-style-type: none"> <li>• Self-reflection and self-assessment</li> <li>• Adaptability and resilience</li> <li>• Self-management</li> <li>• Self-awareness</li> <li>• Responsible decisions</li> </ul>	<ul style="list-style-type: none"> <li>• Time management skills</li> <li>• Equity</li> <li>• Truth and integrity</li> </ul>

## 7.12 Puppet Show as an Assessment Strategy

### Description

Puppet shows can be a creative and engaging way to assess learners' understanding of subject content, their ability to communicate ideas and their collaborative skills. Teachers should use puppet shows as an assessment strategy to evaluate a range of skills and competencies.

### Preparing for the puppet show

*The teacher should:*

- Choose the learning areas that learners have been studying. It could be a historical event, a science concept, a literary work or any other subject matter.
- Divide learners into groups, allowing them to choose their teammates or assign groups based on complementary skills and dynamics.
- Encourage groups to brainstorm ideas, outline a script and decide on the storyline or key messages they want to convey through the puppet show.
- Provide materials or allow learners to create their puppets and props based on their storyline and characters.
- Develop and discuss the performance criteria with the learners.

### During

*The teacher should:*

- Allocate time for groups to rehearse their puppet shows. This helps them refine their scripts, practice dialogue delivery and coordinate puppet movements.
- Organise a day for the puppet show presentations. Ensure a suitable space, appropriate lighting, and a stage setup for each group to perform.

- Let each group perform their puppet show in front of the class or a selected audience. Encourage creativity and expression while allowing learners to showcase their understanding of the topic.
- Evaluate how well the puppet show demonstrates the key concepts, ideas or events related to the chosen topic. Assess the accuracy and depth of understanding conveyed through the storyline.
- Creativity and Presentation: Assess creativity in puppet design, storyline, dialogue, props and overall presentation. Consider the engagement level of the audience during the performance.
- Evaluate how effectively the group members work together. Assess their ability to delegate tasks, cooperate and contribute to the overall success of the puppet show.
- Communication Skills: Evaluate the clarity of dialogue delivery, expression and how well learners articulate ideas through their puppets.

### **After**

*The teacher should:*

- Allow learners to provide feedback to other groups based on predetermined criteria. This encourages reflection and constructive criticism.
- Ask learners to reflect on their performance and contributions to the group. Encourage them to identify strengths and areas for improvement.
- Use a rubric or specific criteria to assess each group's performance. Provide constructive feedback, highlighting both strengths and areas needing improvement.

## **7.13 Demonstration as an Assessment Strategy**

### **Description**

Demonstration as an assessment strategy offers a practical and effective way to evaluate learners' knowledge, skills and abilities by observing their performance in a real or simulated context. This may include a presentation, a practical experiment, a role-play, a performance or a project.

### **Purpose**

The main purpose of using demonstration as an assessment strategy is to allow learners to showcase their skills and competencies through practical application.

*Some of the areas in which learners can demonstrate their proficiencies are:*

- Problem-solving skills
- Critical thinking abilities
- Communication

### **Settings**

- Classroom
- Laboratory/ Workshop /Studio
- Simulation studio/environment

- Field or real-world settings (e.g. field trips, community projects or internships)
- Performance spaces (e.g. theatre, music room or sports field/studio/rooms)
- Online/remote/virtual platform

### **Time frame**

*The timeframe for conducting the demonstration as an assessment strategy depends on the following:*

- Learning outcome(s)
- Complexity of the task to be performed
- Resources

**NB:** *The teacher should provide the learner enough time to demonstrate their abilities and ensure the assessment process is managed within the constraints of the learning environment.*

### **Class size**

Demonstration can be used for individuals or groups (large or small groups) for reasons of attention, support and prompt feedback on factors such as assessors, resources and equipment, learning outcome and the assessment environment.

### **Steps**

#### ***Before***

*The teacher should*

- Set clear expectations of the learning outcomes, specific skills, knowledge and competencies.
- Provide instructions for the demonstration to include safety precautions, criteria for assessment and time.
- Provide learners the opportunity to rehearse the task or the activity to be demonstrated.
- Provide the needed materials and resources to be used for the demonstration.
- Address the concerns learners raised after the rehearsals.
- Distribute the task to the learner(s) considering, Special Education Needs - SEN)

*The learner should:*

- Understand the learning outcomes, specific skills, knowledge and competencies expected of them.
- Take the necessary steps to prepare for the demonstration by reviewing the instructions and rehearsing the expected knowledge, skills and competencies.
- Seek clarification about the instructions and materials to be used for the demonstration.
- Take the opportunity to practice and refine their skills or knowledge before the demonstration.
- Reflect on their previous learning and experiences related to the skills or knowledge being assessed.

**During***The teacher should:*

- Observe the learner's performance of the task demonstrated.
- Provide continuous guidance to the learner(s) on the task, especially when they are working with or in hazardous situations.
- Monitor the progress of the learner(s) on the task.
- Pace the timing of the demonstration such that differentiation is considered.
- Assess the performance of the learners on the task.
- Take notes of critical issues such as learners' strengths and areas for improvement

*The learner should:*

- Focus on the demonstration and actively listen to the instructions and explanations provided.
- Carefully watch the demonstration, noting the steps, techniques and key details being shown.
- Take notes of important points, steps or tips during the demonstration to refer back to later.
- Request feedback from the demonstrator or peers to ensure they are on the right track and identify areas for improvement.

**After***The teacher should:*

- Provide constructive feedback to the learners based on observations, highlighting areas of improvement, reinforcing correct techniques and encouraging further practice.
- Review notes to consider where learners have performed well and areas that need improvement
- Provide support to learners who may be struggling with the demonstrated skills. This can involve additional explanations, demonstrations or one-on-one assistance.

*The learner should:*

- Reflect on their performance during the demonstration and assess their understanding and execution of the demonstrated skills or techniques.
- Share their performance and ask for feedback to improve their learning.
- Identify specific areas where they need further assistance or practice; they can seek out additional resources such as tutorials, online courses or books to support their learning and assessment.

### Cross-cutting issues to be considered in the demonstration assessment

Teachers should take note of the following soft skills in assessing this demonstration assessment.

21st Century Skills and Competencies	GESI and SEL	National values
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Creativity and innovation</li> <li>• Analytic skills</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and teamwork</li> <li>• Self-reflection and self-assessment</li> <li>• Adaptability and resilience</li> </ul>	<ul style="list-style-type: none"> <li>• Time management skills</li> <li>• Tolerance</li> <li>• Respect</li> <li>• Equity</li> <li>• Truth and integrity</li> </ul>

## 7.14 Discussion as an Assessment Strategy

### Description

Discussion is a formative assessment strategy that involves using verbal communication and group interaction to assess learners' understanding, knowledge and skills. The teacher is to observe and assess learners' contributions, ability to analyse and synthesise information and provide feedback based on their performance. It can be used for both formative and summative assessments.

Discussion can be used in all subject areas of the secondary education curriculum depending on the purpose of the assessment and learning outcomes under consideration.

### Purpose

*The following are the purposes of discussion as an assessment strategy:*

- Build knowledge and develop a learner's critical and creative thinking.
- Develop learners' communication skills.
- Increase the depth of the learner's understanding and eliminate misconceptions.
- Engage learners in active participation in the lesson.

### Setting

- A classroom
- Small groups
- Seminars
- Online learning platforms (virtual classroom and discussion forum)
- Fieldwork

### Time frame

Appropriately, discussion as an assessment strategy can last for a lesson depending on the learning outcomes and learning indicators.

## **Class size**

The class sizes appropriate for discussion as an assessment strategy can vary from small class to large/whole class.

## **Steps**

### ***Before***

*The teacher should:*

- Determine the learning outcomes to be assessed.
- Specify the content to be learnt that aligns with the learning outcome.
- Give prepared questions to guide the discussion (i.e. make use of open-ended questions, adaptive to the diverse/abilities of learners)
- Establish discussion guidelines or rules (let learners know what is expected of them, the content of the discussion and the format of the discussion i.e., individual, small or whole class)

*The learner should:*

- Read any assigned readings, watch videos or engage with other course materials related to the discussion topic.
- Take notes while reviewing the materials on important concepts, arguments or evidence.
- Reflect on their own experiences, prior knowledge or relevant examples that relate to the discussion topic.
- Seek clarification if needed.

### ***During***

*The teacher should:*

- Start and facilitate the discussion (ensure that all learners can participate and encourage learners to engage in critical thinking and reflective thinking).
- Monitor and assess learner's participation (encourage self and peer assessment).
- Provide constructive feedback on learners' responses and contributions. **NB.** *Teachers are advised to manage all learners' responses and accommodate them but must be fair and ethical.*

*The learner should:*

- Pay attention, maintain eye contact and be open to different viewpoints and contributions from mates.
- Share their unique perspectives, insights and experiences related to the discussion topic.
- Take notes during the discussion to capture key points, new understanding or questions that arise.
- Ask follow-up questions, seek clarification or offer alternatives or suggestions respectfully.

**After**

The teacher and the learners reflect on the discussion in relation to the expected learning outcomes to check whether the learning outcomes have been achieved.

**Cross-cutting issues to be considered.**

*Teachers should take note of some cross-cutting issues when using discussion as an assessment strategy.*

21st Century Skills and Competencies	GESI and SEL	National values	Differentiation
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Creativity and innovation</li> <li>• Analytic skills</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and teamwork</li> <li>• Self-reflection and self-assessment</li> <li>• Adaptability and resilience</li> </ul>	<ul style="list-style-type: none"> <li>• Time management skills</li> <li>• Tolerance</li> <li>• Respect</li> <li>• Equity</li> <li>• Truth and integrity</li> </ul>	<ul style="list-style-type: none"> <li>• mixed ability group</li> <li>• adaptive questions</li> </ul>

## 7.15 Simulation Assessment Strategy

**Description**

A simulation assessment strategy evaluates learners' skills and knowledge by recreating real-world scenarios. It offers an organised setting for learners to apply theoretical concepts practically which provides a safe space for learners to make mistakes and learn from them. Types of simulations that teachers can use to evaluate learners include creating artificial systems for learners to work on and allowing learners to practice real things in an artificial setting.

**Purpose**

*Teachers and learners conduct simulation assessments to:*

- Gauge how learners can apply their theoretical knowledge.
- Monitor the development of problem-solving and critical-thinking abilities.
- Evaluate the decision-making and practical skills.

**Setting**

- Classroom
- Workshop/laboratory/studios
- Industry/Workplace
- Virtual/online/remote platforms



**Time frame**

The timing should be based on the complexity of the simulation and learning outcomes. This can range from minutes to hours.

**Class size**

This can be adapted for individuals, small groups or whole classes.

**Steps****Before**

*The teacher should:*

- Define specific learning outcomes to be assessed.
- Design how to adapt the simulation for different groups of learners (e.g., learners with SEN), class sizes and levels (consider the mixed abilities of learners and mixed gender for group tasks)
- Guide learners on how to effectively implement the strategy.
- Implement safety measures by ensuring learners know how to respond to emergencies or adverse events. (Consider the adaptability and resilience of learners)
- Develop appropriate rubrics or assessment criteria with the learners.
- Respect ethical guidelines and the learner's well-being (e.g., cultural background of learners, no harm to the learner etc.)
- Ensure all materials and resources such as technology, software, machinery and systems are working.
- Allow learners to familiarise themselves with the materials and resources and make necessary adjustments when needed.
- Ensure that alternative resources for learners with SEN are available based on their respective needs.

*The learner should:*

- Make adequate preparations (e.g., have resources and materials) before the actual implementation.
- Seek clarification about their roles in the simulation strategy.
- Tolerate and respect one another, especially their peers with SEN during the simulation strategy.

**During**

*The teacher should:*

- Ensure the simulation reflects real-life situations as closely as possible.
- Ensure learners apply creativity, innovation and problem-solving skills.
- Provide extra guidance to learners with SEN.
- Monitor learners as they engage in the task.

*The learner should:*

- Make the simulation reflect real-life situations.
- Show creativity, innovation and problem-solving skills.
- Ensure active participation of all their peers, especially learners with SEN in group tasks.

### **After**

*The teacher should:*

- Guide the learners to reflect on the outcomes that have been achieved and provide insights after the simulation (self-reflection, adaptability)
- Provide constructive feedback to learners.
- Encourage peer assessment (allow learners to give constructive feedback to their peers)
- Ensure that feedback is given to individual learners in group tasks and the group in general.

*The learner should:*

- Engage in self-assessment.
- Ensure corrections are made based on feedback from the teacher and peers.

### **Cross-cutting issues are to be considered in this simulation assessment.**

*Teachers should take note of the following soft skills in assessing this simulation*

<b>21st Century Skills and Competencies</b>	<b>GESI and SEL</b>	<b>National values</b>	<b>Differentiation</b>
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Creativity and innovation</li> <li>• Analytic skills</li> <li>• Strategic thinking</li> <li>• Digital literacy</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and teamwork</li> <li>• Self-reflection and assessment</li> <li>• Adaptability and resilience</li> <li>• Respect for diversity</li> <li>• Gender roles and stereotypes</li> <li>• Social inclusion</li> </ul>	<ul style="list-style-type: none"> <li>• Tolerance,</li> <li>• Friendliness,</li> <li>• Open-mindedness,</li> <li>• Patience,</li> <li>• Hard work, humility</li> </ul>	<ul style="list-style-type: none"> <li>• Mixed gender group</li> <li>• Adaptive learning</li> <li>• Mixed ability group</li> </ul>

## 7.16 Checklist as an Assessment Strategy

### Description

A checklist assessment strategy is a tool used by teachers to systematically assess learners' performance in various subjects. It involves a list of specific criteria or skills that learners should demonstrate and teachers mark off items as they observe them in learners' work.

Some concepts that can be assessed using a checklist include Scientific method, experimental design, data analysis, scientific terminology, reading comprehension, writing skills, grammar, and vocabulary, economic principles, market analysis, financial literacy, historical events, cultural awareness, and critical thinking.

### Purpose

Teachers and learners conduct checklist assessments to evaluate learners' understanding and competence in the respective subjects, providing a systematic way to track learners' progress and provide targeted feedback for improvement.

### Setting

- Classrooms
- Online learning environments
- Home-schooling.
- Workshops/laboratory
- Field

### Time frame

Teachers can use checklist assessments as an ongoing basis for formative assessment, as well as summative assessments like tests and projects.

### Class size

The strategy is adaptable to different class sizes, from small groups to large classes. General Guidelines for Teachers and learners in conducting checklist assessment

**NB:** *Teachers should consider learners with learning difficulties and other impairments before using a checklist to evaluate them.*

### Before

*The teacher should:*

- Clearly define the criteria for assessment in each checklist.
- Align the checklists with curriculum standards and learning outcomes.
- Keep the checklists adaptable and flexible to match the specific learning outcomes.

### During

*The teacher should:*

- Use the checklists consistently to assess learners' work. (Consider learners with mixed abilities and SEN)

**After**

*The learner should:*

- Reflect and provide constructive feedback to help improve themselves. (Self and peer assessment)

*The teacher should:*

- Use the results to inform teaching strategies and curriculum adjustments.

**Cross-cutting issues are to be considered in this checklist assessment**

*Teachers should take note of the following soft skills in assessing this checklist*

21st Century Skills and Competencies	GESI and SEL	National values	Differentiation
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Creativity and innovation</li> <li>• Analytic skills</li> <li>• Strategic thinking</li> <li>• Digital literacy</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and teamwork</li> <li>• Self-reflection and assessment</li> <li>• Adaptability and resilience</li> <li>• Respect for diversity</li> <li>• Gender roles and stereotypes</li> <li>• Social inclusion</li> </ul>	<ul style="list-style-type: none"> <li>• Tolerance,</li> <li>• Friendliness,</li> <li>• Open-mindedness,</li> <li>• Patience,</li> <li>• Hard work, humility</li> </ul>	<ul style="list-style-type: none"> <li>• Mixed gender group</li> <li>• Adaptive learning</li> <li>• Mixed ability group</li> </ul>

**7.17 Critiquing as an Assessment Strategy****Description**

Critiquing is an approach that involves the evaluation and feedback of work or performance of learners, to assess their quality, identify strengths and areas that need improvement and facilitate improvement.

Critiquing focuses on helping individuals or groups of learners refine their skills, enhance their work and achieve higher levels of proficiency by encouraging self-reflection and setting goals for improvement.

**NB:** *Critiquing is not the same as criticizing*

It often involves multiple assessors who provide diverse perspectives to offer a comprehensive evaluation. It is commonly used in art/performance, language/ literature.

**Purpose**

*Generally, critiquing is to help provide a learner(s) constructive feedback to achieve learning outcomes. Specifically, critiquing can be used to:*

- Gain a deeper understanding or insight into the subject matter.

- Develop critical thinking and analytical skills.
- Evaluate the quality of work, project or performance.
- Encourage their exploration of new ideas, approaches and perspectives.
- Promote constructive dialogue and the exchange of ideas, facilitating collaboration and teamwork.
- Evaluate different options and select the most suitable path forward.

### **Settings**

- Classroom
- Art/design studio
- Workshop
- Laboratory
- Theatre and Dance/Music studio
- Field

### **Time frame**

The time frame for critiquing can vary widely depending on the specific context and the nature of the work or performance being critiqued.

### **Class size**

The ideal class size for critiquing can vary from individual to small groups or whole classes depending on the learning outcome and the context.

### **Steps**

#### ***Before***

*The teacher should:*

- Define the learning outcome
- Set the stage
- Serve as a moderator
- Give opportunities for learners to critique
- Examine the work learners are critiquing: the teacher must read, observe, or assess the work thoroughly to understand its content and purpose.
- Consider learners with Special Education Needs (SEN) (e.g. Gifted, learning needs, emotional and behavioural needs)
- Encourage all learners to participate
- Discourage bullying, teasing and other conducts that would prevent other learners from critiquing, especially learners with SEN
- Give priority to both boys and girls

*The learner should:*

- Familiarise themselves with the assessment criteria provided by the teacher or the guidelines for the critique.
- Adhere to specific format/template for the critique
- Carefully examine the work they are critiquing
- Respect and tolerate the views of others

***During****The learner and the teacher should:*

- Begin by identifying and highlighting the strengths and areas of improvement and identify specific areas that could be improved.
- Back up their feedback with evidence from the work. Quote or reference specific parts of the work that support their observations.
- Tolerate and respect diverse views or comments from peers
- Ensure the work leaves a lasting impression or achieves its intended goals.

*The teacher should:*

- Comment on the clarity and organisation of the work.
- Consider whether the work effectively caters for its intended audience and serves its purpose.
- Maintain a respectful and professional tone throughout the critique.
- Encourage learners with SEN to bring their comments or contributions
- Ensure that learners who are gifted do not take over the activity
- Allow learners to submit their views either orally or in written form

***After****The teachers should:*

- Allow learners to self-reflect on their work
- Provide suggestions and solutions when they identify issues or areas for improvement
- Assess the originality and creativity of the work.
- Allow peers to review the work
- Guide or assist learners with SEN who may require support in reviewing or reflecting on their work

**Cross-cutting issues that are to be considered in critiquing.**

*Teachers should take note of the following soft skills in critiquing.*

21st Century Skills and Competencies	GESI and SEL	National values	Differentiation
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Creativity and innovation</li> <li>• Digital literacy</li> <li>• Collaboration</li> <li>• Personal development and leadership</li> </ul>	<ul style="list-style-type: none"> <li>• Adaptability and resilience</li> <li>• Collaboration and teamwork</li> <li>• Self-reflection and self-assessment</li> <li>• Self-esteem</li> </ul>	<ul style="list-style-type: none"> <li>• Tolerance</li> <li>• Respect</li> <li>• Truth and integrity</li> <li>• Time management skills</li> </ul>	<ul style="list-style-type: none"> <li>• Mixed Ability Groups</li> <li>• Adaptive learning.</li> <li>• Learners with special needs</li> </ul>

## 7.18 Research as an Assessment Strategy

### Description

Research as an assessment strategy is a systematic process of inquiry and investigation that aligns with a particular learning outcome to develop knowledge and understand a phenomenon. It involves identifying an issue in

need of investigation, collecting and analysing data, conducting experiments, and drawing conclusions based on the findings. Once learners have completed their research work, they will write a report and do a presentation on their findings.

### Purpose

*Research as an assessment strategy is used to assess learners ability to:*

- Identify a problem and gather information (data) from a variety of sources.
- Evaluate the credibility and accuracy of information.
- Analyse and synthesise information from multiple sources.
- Communicate their findings clearly and concisely.

### Setting

- Classrooms
- Factories/ Industries
- School farms
- School communities
- Libraries
- Homes.
- Fieldwork
- Workshops

**Class size**

As a teacher, depending on the number of learners in your class, individual or group research-based assessment can be used. However, teachers can create large groups for complex research, where different members can focus on specific aspects of the research.

**Time frame**

The time frame for conducting a research-based assessment can vary depending on the complexity of the learning outcomes (skill to be achieved) may be:

- Short-term
- Medium-term
- Long-term

**Steps*****Before***

*The teacher should:*

- Define the learning outcomes.
- Develop a theme in line with learning outcomes.
- Design the research work and provide a description that is in line with learning outcomes.
- Define specific tasks to be undertaken in developing the research.
- create a timeline.
- Select resources and materials needed.
- Provide guidance and support for learners.
- Develop clear assessment rubrics.
- Provide feedback and revisions.

***During***

*The teacher should:*

- Provide clear guidelines for developing the research and how to assess it.
- Design and plan the research work to align with the learning outcomes.
- Provide necessary resources, materials and support to help learners succeed in their research work.
- Guide learners in reflecting on their research-based assessments and help them develop metacognitive skills.

***After***

*The teacher should:*

- Alignment with learning outcomes: The research work should be aligned with the learning outcomes of the content standards. This means that the research work should allow learners to demonstrate their understanding of the course material and to develop the skills that are being taught.



- **Originality:** The research work should be original and not simply a rehash of existing information. Learners should be encouraged to develop their ideas and to come up with their conclusions.
- **Critical thinking:** The research work should demonstrate that learners can conceptualise, apply, analyse, synthesise and evaluate the information they have gathered and come up with an action plan.
- **Communication skills:** The research work should be well-written and well-organised. Learners should be able to communicate their findings clearly and concisely.

### **Cross-cutting issues to be considered in this portfolio assessment**

*Teachers should take note of the following soft skills in assessing this research.*

<b>21st Century Skills and Competencies</b>	<b>GESI and SEL</b>	<b>National values</b>
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Creativity and innovation</li> <li>• Analytic skills</li> <li>• Active learning competencies</li> <li>• Collaboration and teamwork</li> </ul>	<ul style="list-style-type: none"> <li>• Self-reflection</li> <li>• Adaptability and resilience</li> <li>• Cooperation</li> <li>• Self-discipline</li> </ul>	<ul style="list-style-type: none"> <li>• Time management skills</li> <li>• Tolerance</li> <li>• Respect</li> <li>• Equity</li> <li>• Truth and integrity</li> <li>• Honesty</li> <li>• Accountability</li> <li>• Responsibility</li> <li>• Appreciation</li> <li>• Stewardship</li> </ul>

## **7.19 Class Exercise as an Assessment Strategy**

### **Description**

Class exercises as an assessment strategy are tasks designed to evaluate learner's understanding, knowledge and skills related to a particular subject to gauge how well learners are grasping the content being taught.

Teachers should mainly use class exercises for formative purposes to assess learners across all subject areas, which can take various forms such as quizzes, problem-solving tasks, group discussions, reflective questions, case studies, question and answer and practical activities, performance, observation, checklist/rubrics and demonstration providing valuable insights into the learning process.

### **Purpose**

*Class exercises can be used to:*

- Help identify learning gaps in comprehension, retention, application of knowledge, values and attitudes.

- Allow for immediate feedback and clarification of concepts.
- Encourage active participation of learners for deeper understanding.
- Modify teaching and learning techniques, strategies and resources based on learning outcomes.
- Gradually build learners' performance in a lesson over time to reduce summative test anxiety.
- Help identify learners who may require special educational support.
- Accommodate different learning styles and abilities, including group work and multiple representations for learners with special educational needs.

### **Settings**

- Classroom
- Laboratory/Workshops/Resource Centres/Libraries
- Studios
- Field (school park/garden or community spaces)
- Online learning platforms/Virtual classrooms e.g. Zoom, Class WhatsApp pages, Google classrooms.

### **Time frame**

Class exercises often take place in a lesson and may be conducted before, during and after a lesson depending on the learning outcome and the duration of the lesson.

### **Class size**

Class exercises may be conducted for learners either individually, as a group or whole class.

### **Steps**

#### ***Before***

*The teacher should:*

- Define the learning outcomes.
- Design exercises using simple and clear language.
- Select relevant exercises based on the nature of the class exercise and desired skills/knowledge to be attained. E.g. quizzes, case studies etc.
- Develop and discuss assessment criteria with learners.
- Set a reasonable time frame for the completion of exercises to maintain focus and efficiency.
- Clearly communicate instructions, including format, length and resources.

*The learner should:*

- Read and understand instructions to ensure a thorough understanding of the exercise provided.
- Collect all available required resources and tools for the task/exercise.

**During**

*The teacher should:*

- Assign tasks/ exercises based on the learning outcome, as well as learners with special needs.
- Walk around the classroom and observe learners as they work on the exercise.

*The learner should:*

- Organise and set up their work area to facilitate a smooth workflow.
- Plan how to approach the exercise, considering instructions and steps or techniques to employ.
- Commence class exercise timely and promptly to work within the given time for completion of the task.

**After**

*The teacher should:*

- Evaluate the assessment outcome based on the assessment criteria with the learners.
- Provide constructive feedback for learners' performance for discussions.

**NB:** Teachers should pay attention to learners with special educational needs.

- Reflect and modify teaching and learning strategies and resources based on feedback received.

*The learner should:*

- Reflect, self- and peer-assess their exercises and provide constructive feedback.
- Use the feedback to improve on their work/exercises.

**Cross-cutting issues are to be considered in using class exercises.**

*Teachers should take note of the following soft skills:*

21st Century Skills and Competencies	GESI and SEL	National values	Differentiation
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Creativity and innovation</li> <li>• Analytic skills</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and teamwork</li> <li>• Self-reflection and self-assessment</li> <li>• Adaptability and resilience</li> <li>• Interest</li> </ul>	<ul style="list-style-type: none"> <li>• Time management skills</li> <li>• Tolerance</li> <li>• Respect</li> <li>• Equity</li> <li>• Truth and integrity</li> </ul>	<ul style="list-style-type: none"> <li>• Mixed ability task groups</li> <li>• Adaptive learning</li> </ul>

## 7.20 Multiple Choice Questions as an Assessment Strategy

### Descriptions

A Multiple-Choice Question (MCQ) is a form of objective test where the learner is given a question or incomplete statement and is required to choose the most appropriate option or response from a set of provided alternatives. MCQs consist of four parts:

- 1 Stem- question or incomplete statement
- Options- suggested answers or completion
- Distracters/foils- incorrect responses
- Key- correct responses

### Purpose

*The teacher can use MCQs to:*

- Cover a wide range of content when assessing learning outcomes.
- Evaluate knowledge and understanding among learners on a learning outcome.
- Provide quick feedback to learners.
- Empower learners to be self-reflective.
- Identify common misconceptions among learners.

### Settings

*MCQs as an assessment strategy are often used in the*

- Classroom
- Examination centres

### Time frame

The time allotted for MCQs should be informed by the following:

- The number of test items to be used.
- The ability level of learners.
- The needs of the learner

### Class size

MCQs are time-efficient when scoring learners' responses, this makes them appropriate for all class sizes.

### Steps

*Here are the steps a teacher should follow when using MCQ as an assessment strategy:*

#### **Before**

*The teacher should:*

- Clearly define the purpose of the test/assessment
- Define the learning outcome (i.e. knowledge, comprehension, skills or competencies) you want learners to demonstrate through MCQs.

- Prepare a table of test specifications or blueprints.
  - i. List topics and subtopics covered during the instructional period
  - ii. Distribute the number of test items among course content and instructional objectives or behaviours.
- Write the test items (note: it should match the content and DoK levels stated in the table of test specifications).

### **Some guidelines for constructing MCQs**

- i. The central issue of the items should be in the question statement (stem).
  - ii. The options should be plausible and homogeneous in content.
  - iii. All options must follow syntax and punctuation rules.
  - iv. Repetition of words in the options should be avoided.
  - v. Vary the placement of the correct option.
  - vi. Stems and options should be stated positively. However, a negative stem could be used sparingly and the word should be emphasized either by underlining it or writing it in capital form.
- Write clear directions/instructions.
  - Review the test items.
  - Prepare scoring key.

### **During**

*The teacher should:*

- Administer constructed MCQs in a controlled environment to prevent cheating.
- Provide clear directions/instructions to learners.

### **After**

*The teacher should:*

- Score test items using the scoring rubric.
- Provide constructive feedback to learners on each question.
- Encourage learners to reflect on their strengths and areas they need to improve in
- Evaluate the test items.

### **Cross-cutting issues to be considered in MCQs**

<b>21st Century Skills and Competencies</b>	<b>GESI and SEL</b>	<b>National values</b>
<ul style="list-style-type: none"> <li>• Critical thinking</li> <li>• Problem-solving</li> </ul>	<ul style="list-style-type: none"> <li>• Self-assessment and reflection</li> <li>• Metacognition</li> </ul>	<ul style="list-style-type: none"> <li>• Tolerance</li> <li>• Honesty</li> <li>• Time management skills</li> </ul>

## 7.21 e-Assessment-Portfolio Strategy

### Description

e-Assessment (online assessment/computer-based assessment) refers to assessment methods and procedures that emphasise the role of information technology in measuring learners' academic progress from remote or virtual locations.

### Purpose

Electronic assessment arises from the use of Web-specific tools for assessment. It can be used to assess theoretical knowledge (using e-testing software), as well as practical skills (using e-portfolios or simulation software).

### Setting

- Project-Based Learning
- Independent Study and Research Projects
- Virtual-based assessment
- Field Trip/ Excursion
- Exhibition
- Problem-based Learning
- Laboratory environment
- Studio
- Resource Centres

### Time frame

*Deciding on the Time frame for e-Assessment depends on and includes the following:*

- Nature of project/problem or assignment
- Class size
- Logistics

### Steps

#### **Before**

*The teacher should:*

- Be clear at the outset what the aims for using e-Assessment are but be prepared to adapt them as you develop the process.
- Identify what to be assessed – think back to the learning outcomes and what the most appropriate way to assess these would be.
- Do a system audit to know what hardware is in place. How will staff and students access the assessment?
- Be aware that moving to e-Assessment is a change that needs to be managed carefully. It is useful to think about the timescale and what you can realistically achieve within that period.

- If moving to 100% e-Assessment, think about whether to do this gradually or all at once. If using a combination of e-Assessment and traditional modes, think about where the balance will lie.
- Identify or develop the scoring criteria (e.g., a rubric) to judge the quality of the portfolio.
- Establish standards of performance and examples (e.g., examples of a high, medium, and low-scoring portfolio).
- Pilot the process, a pilot is a crucial step in the rollout because it will highlight the issues ahead of time, gather feedback from all stakeholders and act on that feedback.
- Create learner instructions that specify how learners use the assessment platform.
- Make room for learners with special education needs

### **During**

*The learner should:*

- Collect evidence related to the outcomes being assessed.
- Select the best and appropriate pieces of evidence and label each piece of evidence according to the learning outcome being demonstrated.
- Be guided on how to use the e-Assessment platform during the assessment period.
- Be given dates and instructions.
- Reflect on the feedback and revise their work for final submission

### **After**

- Assignments or activities are graded by the teacher
- The teacher reflects on his/her activity to improve the use of the technologies used in e-Assessment.
- The teacher should identify learners with special needs and concerns to help address them.

### **Cross-cutting issues to be considered in using e-Assessment portfolio.**

*Teachers should take note of the following soft skills in assessing this e-Assessment*

<b>21st Century Skills and Competencies</b>	<b>GESI and SEL</b>	<b>National values</b>
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Creativity and innovation</li> <li>• Analytic skills</li> <li>• Active learning competencies</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and teamwork</li> <li>• Self-reflection</li> <li>• Adaptability and resilience</li> <li>• Cooperation</li> <li>• Self-esteem/ Self-discipline</li> </ul>	<ul style="list-style-type: none"> <li>• Time management skills</li> <li>• Tolerance</li> <li>• Equity</li> <li>• Truth and integrity</li> <li>• Honesty</li> <li>• Accountability</li> </ul>

## 7.22 Virtual Reality as an Assessment Strategy

### Description

Virtual reality as an assessment strategy in education is a novel approach to assess and evaluate learners' knowledge, understanding, skills and competencies of various subjects and concepts using virtual reality (VR) technology. This method takes learning to a new level by immersing learners in computer-generated, three-dimensional environments, where they can interact with realistic scenarios or abstract concepts.

Virtual reality as an assessment strategy can be applied to a wide range of subjects such as science, STEM-related subjects, history, geography, mathematics, social studies, music and performing arts, computer science etc.

### Purpose

The primary goal of virtual reality as an assessment is to enhance education by immersing learners in lifelike environments, boosting engagement, bridging the gap between theory and practice, and evaluating practical skills. These assessments personalise learning experiences, promote inclusivity and simulate real-world situations, ultimately aiming to improve educational quality and outcomes.

### Settings

- Virtual classrooms
- Laboratory
- Field site
- Workshop

### Class size

The class sizes appropriate for virtual reality as an assessment strategy can vary from small classes to large/whole classes.

### Time frame

The time frame for conducting a virtual reality as an assessment strategy depends on the specific learning outcome, learning indicator and availability of resources.

### *Preparation and Planning*

- Familiarisation with VR Technology: Teachers must thoroughly acquaint themselves with the VR hardware and software they intend to use, including VR headsets, controllers and relevant applications.
- Select Suitable VR Content: Teachers choose VR content that aligns with the curriculum and learning outcome. Also, they should set the assessment criteria or rubrics to be used. Teachers should ensure age-appropriate, relevant to the subject matter and learners with special educational needs.
- Lesson Planning: Teachers should discuss the purpose of the assessment, the instructions and the assessment criteria or rubrics to be used.



**During***Implementation and Facilitation*

- During the VR Session: teachers should guide learners on how to interact with the VR environment and outline the specific tasks or challenges learners are expected to complete (NB: teachers should be conscious of adaptive or differentiated tasks to suit learners' needs).
- Supervision and assistance: Teachers should supervise learners while they use the VR equipment and ensure their safety and proper use. Teachers should take into consideration learners with special educational needs and Socio-Emotional Learning (SEL) issues.
- Facilitate VR Assessment: Teachers should assist learners in completing the task or respond to questions within the VR environment to demonstrate learners' understanding, skills and competencies.
- Data Collection: Teachers should collect data on learners' performance. This may include recording learners' actions or taking notes on learners' responses.

**After***Assessment and Post-VR Activities*

- Feedback and discussion: Teachers should engage learners to discuss their experiences and encourage them to reflect on what they have learned and how the VR content contributed to their understanding.
- Assessment and grading: Teachers should evaluate the performance based on the established assessment criteria or rubrics.

**Cross-cutting issues that are to be considered in virtual reality as an assessment.**

*Teachers should take note of some cross-cutting issues when using Virtual Reality as an Assessment Strategy.*

21st Century Skills and Competencies	GESI and SEL	National values	Differentiation
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Creativity and innovation</li> <li>• Analytic skills</li> <li>• Logical reasoning • Digital literacy skills</li> <li>• etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and teamwork</li> <li>• Self-reflection and self-assessment</li> <li>• Adaptability and resilience</li> <li>• etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Time management skills</li> <li>• Tolerance</li> <li>• Respect</li> <li>• Equity</li> <li>• Truth and integrity</li> <li>• etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Mixed ability task groups</li> <li>• Adaptive learning</li> </ul>

## 7.23 Peer/Self Assessment Strategy

### Description

Peer/self-assessment is a type of performance monitoring and evaluation related to a learning outcome done by or among learners under the supervision of a teacher to track their learning progress. It can be used as both formative and summative assessment. However, it is predominately used for formative assessment purposes.

### Purpose

Peer/self-assessment provides an opportunity for learners to reflect and provides insight, leading to meaningful feedback on their or other learners' work (behaviours, competencies and experiences). Peer/self-assessment enhances deep learning and understanding among learners and trains learners to track their progress and areas for improvement.

### Setting

- Classroom-based environment
- Fieldwork
- Laboratory i.e., Science Resources Centres
- Studio
- Workshop

### Class size

Peer assessment strategy can be done in small groups or whole class.

### Time frame

The time frame depends on the complexity of the assignment, the estimated period of the lesson stated in the curriculum and how learners have been adequately prepared.

However, the time should neither be too short nor too long.

*The teacher should:*

- Set clear expectations of the learning outcome, skills and competencies
- Decide the structure and format of the assessment e.g.: written or oral
- Introduce the learners to the assignment to be assessed
- Develop the assessment criteria and scoring rubrics with learners.

### During

*The teacher should:*

- Model peer/self-assessment by letting learners assess or review what he has taught to open them up to the assessment to be conducted.
- For peer assessment, lead the pairing or grouping for the assessment. In doing this, the teacher should consider mixed groupings and avoid inter-pairing and pairing amongst friends. (fairness and transparency)
- In self-assessment, the teacher should guide learners with special educational needs in their assessment through questioning
- Provide constructive feedback to learners after the assessment

*The learner should:*

- Work and submit assignments
- Assess their assignments or those of other learners and give constructive feedback
- Reflect on the feedback received and revise the work for final submission

### **After**

*The teacher should:*

- Grade the assignments (summative)
- Reflect on the activity with learners
- Offer help or intervention in areas where learners need help
- Work on areas that need improvement

**NB:** The teacher should be a mediator between arguing learners and should also consider and guide learners in their approach to providing feedback. (Be conscious of gender, cultural, social and religious sensitive comments and issues).

The teacher should also provide multiple opportunities or formats for learners to assess to accommodate all learners.

### **Cross-cutting issues to be considered in peer assessment.**

*Teachers should take note of the following soft skills during peer assessment:*

21st Century Skills and Competencies	GESI and SEL	National values
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Analytic skills</li> <li>• Leadership</li> <li>• Strategic thinking</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and teamwork</li> <li>• Self-reflection</li> <li>• Adaptability and resilience</li> <li>• Self-awareness</li> <li>• Social awareness</li> <li>• Self-management</li> <li>• Relationship skills</li> <li>• Responsible decision making</li> </ul>	<ul style="list-style-type: none"> <li>• Truth and integrity</li> <li>• Respect</li> <li>• Equity</li> <li>• Tolerance</li> <li>• Confidence</li> <li>• Responsibility</li> <li>• Accountability</li> <li>• Self- esteem</li> </ul>

## 7.24 Essay Type Assessment Strategy

### Description

An essay-type assessment requires the learner to compose a coherent, structured and analytical response to demonstrate an understanding of content and concepts, communicate ideas and evaluate writing skills. It is a comprehensive and in-depth evaluation of learners' knowledge, critical thinking skills (e.g. conceptualising, applying knowledge, synthesising, evaluating information) and ability to communicate ideas clearly. Essay-type assessment is used to assess complex learning outcomes.

There are two main types of essay-type assessments: the Extended Response (open-ended) essay type, where there are no restrictions on the response, including the amount of time allowed to finish, the number of pages written or the material included and the Restricted Response (closed-ended) essay, which imposes strict limits on both content and the response given by the learners.

### Purpose

- Evaluates the learners' depth of understanding, analytical abilities, and their capacity to communicate effectively through writing.
- Encourages critical thinking, creativity and the development of a coherent argument and evaluation in writing.
- Provide insights into a learner's ability to structure ideas, use evidence to support claims and engage with complex concepts.
- Assess a learner's mastery of specific content and research skills.

### Setting

- Classroom
- Laboratories
- Field/workshop
- Virtual/Online

### Class size

This assessment strategy can be used individually in small groups or whole class

### Time frame

Time is dependent on the type of essay, the desired learning outcomes and the complexity of the content.

### Steps

#### **Before**

*The teacher should:*

- Clearly state the learning outcome to be assessed with the essay.
- Communicate the specific content, type of essay and criteria.
- Consider the diversity and the needs of the learner such as SEN, socio-cultural background, ability to write among others.

- Prepare all the material needed for the assessment.
- Ensure questions are of a similar level of difficulty.
- Make known the scope of the essay required.
- Provide time allocation for the completion of the essay and assign marks to each of the questions (Give additional time for learners with SEN)
- Let the learners know the required pages or length of the essay.
- Develop the rubrics for scoring the essay.
- Make known to learners the need to acknowledge the source of their information.
- Consider the number of learners in the class.

*The learner should:*

- Understand the purpose of the essay, the specific skills or knowledge being assessed and the criteria for evaluation.
- Read and understand the instructions carefully (seek clarification if any aspects of the questions are unclear)
- Draft a plan for responding to the essay question (main points to consider)
- Pay attention to the teacher's guidance and use the provided models as a reference for structuring and presenting ideas.

***During***

*The teacher should:*

- Give guidelines to the learner during the writing task.
- Emphasise the importance of planning, drafting, revising and finalising the work.
- Provide physical prompts or visual prompts to the learner who may require assistance.
- Provide support and accommodation for students with special needs such as extra time or a quiet testing environment.

*The learner should:*

- Seek assistance from the teacher or peers if needed.
- Make use of available resources (e.g. textbooks, passages, magazines notes)
- Be guided by the time allocation and the expectations for the completion of the essay.

***After***

*The teacher should:*

- Score the essay consistently based on the established criteria to reduce subjectivity.
- Focus on the content rather than sentence structure, grammar, punctuation among others in all subject areas except the English language.
- Give oral and written comments to the learner in the provision of feedback.
- Encourage peer critiquing in the feedback process.
- Give constructive feedback individually, in small groups and whole class.

*The learner should:*

- Reflect on the feedback provided by the teacher/peers.
- Identify areas for improvement and work on them.
- Share their work with peers and seek peer support.
- Engage in continuous practice.

**Cross-cutting issues to be considered when using essay.**

*The Teacher should take note of the following soft skills during the use of Essays:*

21st Century Skills and Competencies	GESI and SEL	National values
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Analytic skills</li> <li>• Creativity</li> </ul>	<ul style="list-style-type: none"> <li>• Self-reflection and self-assessment</li> <li>• Adaptability and resilience</li> <li>• Collaboration and teamwork</li> </ul>	<ul style="list-style-type: none"> <li>• Truth and integrity</li> <li>• Respect</li> <li>• Responsibility</li> <li>• Confidence</li> </ul>

## 7.25 Poster as an Assessment Strategy

### Description

A poster contains information on a fairly large sheet of material in the form of text pictures or both for a display. Poster as an assessment strategy allows learners to demonstrate their understanding, knowledge skills and creativity in their subject of study through visual and interactive presentation using a combination of text, graphics and images on a poster board for effective evaluation. Poster presentation is an assessment tool that can be adapted to suit various educational levels and subjects. They engage learners in a dynamic learning process, allowing them to not only gain knowledge but also develop valuable skills in communication, research and design.

### Purposes

The purpose of Poster Assessment is to assess learners' ability to research, accommodate other learners' views and critically express their comprehension of a particular learning outcome through effective communicative visual representations.

### Setting

Poster Assessment Strategy can be conducted in various educational settings, basic to higher education level in classrooms, workshops, studios, exhibition halls, assembly halls etc. Setting can also be at any available suitable place within the school or the reach of the school. For example, community halls or centres.

## **Class Size**

Poster presentations are adaptable to different class sizes, ranging from small groups to large lecture-style classes. Smaller classes may facilitate more in-depth feedback and discussions, while larger classes can benefit from variety in presentation styles.

## **Time Frame**

The time frame for a poster presentation assessment varies depending on the allocated period for the subject and the learning outcome. The teacher can extend the exercise to another day or period if working on large class numbers.

## **Steps**

### ***Before***

*The teacher should:*

- Choose strands and sub-strands from the curriculum and align them with the learning outcomes.
- Clearly communicate the learning outcome, requirements and assessment criteria to learners and guide them in their research, information organisation and content for the poster assessment.
- Brief learners on the assessment criteria to be used and clearly let learners understand the reason for assessing them by the Poster Assessment process

*The learner should:*

- Understand the learning outcome, read around it and prepare for the lesson
- Clearly research, organise and gather information on the content, bearing in mind the assessment criteria for the poster assessment.

### ***During***

*The teacher should:*

- Guide learners to create good assessment posters. Emphasize the use of graphics, images and concise text.
- Encourage a peer review process to foster collaboration and constructive feedback as the learner progresses.

### ***After***

*Role of the Teacher and Learner*

- Both agree on a specific day for the poster presentation assessment
- Take learners through the criteria to be used in grading or assessing works
- Evaluate learners' poster assessment portfolios based on pre-defined criteria, which should include content, visual appeal and presentation skills.
- After the presentation, ask learners to reflect on the process and what they have learned.

**Cross-cutting issues are to be considered in using poster as an assessment strategy.**

*Teachers should take note of the following soft skills in assessing this portfolio*

21st Century Skills and Competencies	GESI and SEL	National values	Differentiation
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Creativity and innovation</li> <li>• Analytic skills</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and teamwork</li> <li>• Self-reflection and self-assessment</li> <li>• Adaptability and resilience</li> </ul>	<ul style="list-style-type: none"> <li>• Time consciousness</li> <li>• Tolerance</li> <li>• Respect</li> <li>• Equity</li> <li>• Truth and integrity</li> </ul>	<ul style="list-style-type: none"> <li>• Mixed gender group</li> <li>• Adaptive instructions</li> <li>• Mixed ability group</li> <li>• Socio- economic background</li> </ul>

## 7.26 Dramatic Monologue Strategy

### Description

Dramatic monologue refers to self-conversation, speech or talks which includes discussions presented dramatically. It means a person who is speaking to himself or someone else speaks to reveal specific intentions of his actions. However, in literature, it is in a poetic form or a poem that is presented in the form of a speech or conversation with a person in a dramatic manner.

### Purpose

Dramatic monologues are ways of expressing the views of a character and offering the audience greater insight into that character's feelings.

### Setting

- Classroom
- Theatre

### Class size

Teachers should note that dramatic monologue as an assessment strategy works best for all forms of class size. However, teachers should make provision for sound systems when the class size is extremely large.

### Time frame

A dramatic monologue can vary in length, but it is typically between 1 and 10 minutes. It should be long enough to reveal the character's thoughts and emotions, but not so long that it becomes boring to the audience. The length of the monologue should be appropriate for the context of the play or performance in which it is being presented.



## Steps

### **Before**

*The teacher should:*

- Explain the purpose of using dramatic monologue to assess learners' understanding of a literary text.
- Determine the monologue's goal (e.g., Is the character expressing injustice in society? Or is it about the quest for power? Etc.)
- Discuss with the learner the rules of engagement including the criteria for assessing the monologue.

*The learner should:*

- Explore the character thoroughly. What is the connection between the character and the situation they're giving a monologue about? A monologue that feels incongruent with the character's other speech and actions will only confuse and potentially turn off readers or viewers, so make sure the monologue is in character.
- Determine the monologue's audience (e.g., Class, school-wide or community).

### **During**

*The teacher should:*

- Give an initial background of the story/play by which a monologue is to be developed.
- Call learners on stage to present their work one after the other.

*The learner/narrator should:*

- Hook listeners with a powerful beginning; hook listeners with something that captures their attention, like a loud noise or jarring statement.
- Communicate the monologue subject matter using storytelling techniques; use storytelling techniques, such as figurative language and repetition, to keep listeners interested as the character progresses through their monologue.
- End on a strong note. Finish the monologue with a definitive statement that makes the character's next move—and state of mind about it—clear. The monologue's ending shouldn't be overly long or complicated.

### **After**

*The teacher should:*

- Discuss the monologue presented with learners and make revisions where necessary.
- Provide constructive feedback on learners' work to them individually.

*The learner should:*

- Self-reflect on his or her performance.
- Modify his/her work using the constructive feedback provided by the teacher and peers.

### Cross-cutting issues to be considered in the use of dramatic monologue assessment

Teachers are to be mindful of the following cross-cutting issues and their accompanying soft skills when using Dramatic Monologue assessment:

21st Century Skills and Competencies	GESI and SEL	National values	Differentiation
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Creativity and innovation</li> <li>• Analytic skills</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and teamwork</li> <li>• Self-reflection and self-assessment</li> <li>• Adaptability and resilience</li> </ul>	<ul style="list-style-type: none"> <li>• Time management skills</li> <li>• Tolerance</li> <li>• Respect</li> <li>• Truth and integrity</li> </ul>	<ul style="list-style-type: none"> <li>• Learners with educational needs</li> </ul>

## 7.27 Dramatisation as an Assessment Technique Strategy

### Description

The use of dramatisation as an assessment strategy refers to allowing learners to convert a narrative in some other form (e.g. a novel or a short story) into a drama for stage, screen, or radio performance. Drama is a mode of fictional representation through dialogue and performance. The main types are comedy and tragedy dramas (also known as comic or tragic dramas).

### Purpose

Dramas are written in the form of a script, and actors perform interpretations of the characters involved to tell a story for an audience to learn from.

### Setting

- Classroom
- Theatre
- Field/Open space

Dramatisation is a group-based activity which works for all class sizes. However, teachers should make provision for sound systems when the class size is extremely large.

### Time frame

A dramatisation can vary in length depending on the script on which the drama is based. However, as an assessment strategy, learners are often not made to act scripts out beyond 45 minutes.

**Steps****Before***The teacher should:*

- Have a plenary discussion with the learners on the purpose of using drama to assess them.
- Share with learners the defined criteria to observe and the scoring procedure.
- Put learners into smaller groups (e.g., groups of 2 to 5)
- Discuss with learners the available resources to be used.
- The relevant stage that fits each group's drama should be set ahead of time.

*The learner should:*

- Scripts to be dramatised should be readily available to the teacher ahead of time.
- Rehearsed the drama to be presented.
- Make their costumes to be used in the drama ready.

**During***The teacher should:*

- Create a conducive atmosphere for learners to be able to act (e.g., do not shout at any learner, do not threaten learners with grades)
- Manage the rest of the class for a serene learning environment.
- Monitor the time to be used in performing on a stage.

*The learners should:*

- Put on the rightful costume for the drama
- Perform the play/drama on stage for the audience to observe.

**After***The teacher should:*

- initiate and moderate a final plenary discussion about the performed drama.
- take constructive feedback from the learners about the performed play/ drama.
- communicate assessment feedback to the group that performed the drama.

*The learners should:*

- self-reflect on the drama, that is, considering what went well and areas that require modification.

### Cross-cutting issues to be considered in the use of dramatisation as an assessment strategy

Teachers are to be mindful of the following cross-cutting issues and their accompanying soft skills when using dramatisation to assess learners:

21st Century Skills and Competencies	GESI and SEL	National values	Differentiation
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Creativity and innovation</li> <li>• Analytic skills</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and teamwork</li> <li>• Self-reflection and self-assessment</li> <li>• Adaptability and resilience</li> </ul>	<ul style="list-style-type: none"> <li>• Time management skills</li> <li>• Tolerance</li> <li>• Respect</li> <li>• Equity</li> <li>• Truth and integrity</li> </ul>	<ul style="list-style-type: none"> <li>• Persons with special education needs.</li> </ul>

## 7.28 Gamification as an Assessment Strategy

### Description

The gamified assessment incorporates game elements into traditional assessments to measure specific skills, knowledge, or competencies. These game elements may include point systems, badges, leaderboards, progress bars, rewards and challenges. Gamified assessment is typically different from game-based assessment. Game-based assessments are more game-like and involve gameplay elements (e.g. the use of puzzles, video games, etc.). However, gamified assessments add game elements to traditional tests to increase engagement with candidates. Teachers are encouraged to make use of both gamified and game-based assessments in measuring learning outcomes.

### Purpose

Gamified assessment assists teachers in measuring learners' knowledge and skills through the use of games that relate to the learning outcome under consideration. The use of this strategy also encourages creative expression and collaborative learning.

### Setting

- Classroom
- Laboratories (i.e., both science and ICT)
- Field

### Class size

Teachers should note that gamified assessment works best for all forms of class size. Teachers should, however, be strategic in making learners work individually or in moderate/ large groups depending on their unique situation.

### Time frame

Teachers should note that the learning outcome and learners' achievement expectations may inform the appropriate time frame for the use of gamified assessment. However, this

assessment strategy is mostly effective when it is executed within the teaching and learning time frame.

## Steps

### **Before**

*The teacher should:*

- State the purpose of the assessment.
- Specify the learning outcome to be assessed using the gamified assessment procedure.
- Discuss with learners the appropriate game(s) to be used.
- Ensure learners have been exposed to the content under discussion (i.e., the concept of manoeuvres).
- Organise learners into groups (e.g., groups of 2-5).
- Make learners within a group pick a common game (e.g., Bingo, pass the object, four corners etc.)
- Discuss with learners the rules of engagement which include the scoring criteria (e.g., teams that can coordinate well to exhibit good manoeuvring skills will be awarded badges).

### **During**

*The teacher should:*

- Guide learners as they undertake gamified assessment exercises.

### **After**

*The teacher should:*

- Collaborate with learners to rate the outcome of the gamified exercise.
- Communicate feedback on the assessment to the learners.
- Provide information on how the assessment feedback would be used.

## **Cross-cutting issues to be considered in the use of gamified assessment**

*Teachers are to be mindful of the following cross-cutting issues and their accompanying soft skills when using gamified assessment:*

<b>21st Century Skills and Competencies</b>	<b>GESI and SEL</b>	<b>National values</b>
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Creativity and innovation</li> <li>• Analytic skills</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and teamwork</li> <li>• Self-reflection and self-assessment</li> <li>• Adaptability and resilience</li> </ul>	<ul style="list-style-type: none"> <li>• Time management skills</li> <li>• Tolerance</li> <li>• Respect</li> <li>• Equity</li> <li>• Truth and integrity</li> </ul>

## 7.29 Research as an Assessment Strategy

### Description

Research as an assessment strategy is a systematic process of inquiry and investigation that aligns with a particular learning outcome to develop knowledge and understand a phenomenon. It involves collecting and analysing data, conducting experiments and drawing conclusions based on the findings. Once learners have completed their research work, they will write a report and do a presentation on their findings.

### Purpose

Research as an assessment strategy is used to assess learner's ability to:

- Identify and gather information from a variety of sources.
- Evaluate the credibility and accuracy of information.
- Synthesis information from multiple sources.
- Communicate their findings clearly and concisely.

### Setting

*Research assessment is carried out in a variety of contexts including:*

- Classrooms
- Factories/ Industries
- School farms
- School communities
- Libraries
- Homes.
- Fieldwork
- Workshops

### Class Size

As a teacher, depending on the number of learners in your class, individual or group research-based assessment can be used. However, teachers can create larger groups for complex research, where different members can focus on specific aspects of the research.

### Time Frame

The time frame for conducting a research-based assessment can vary depending on the complexity of the learning outcomes (skill to be achieved) may be:

- Short-term
- Medium-term
- Long-term

### Role of Teachers and Learners in Research Assessment

*The teacher should:*

- Provide clear guidelines for developing the research and how to assess it.

- Provide necessary resources, materials and support to help learners succeed in their research work.
- Guide learners in reflecting on their research-based assessments and help them develop metacognitive skills.

*Learner should:*

- Design and plan the research work to align with the learning outcomes.

### Steps

- Define the learning outcomes.
- Develop a theme in line with learning outcomes.
- Design the research work and provide a description that is in line with learning outcomes.
- Define specific tasks to be undertaken in developing the research.
- Create a timeline.
- Select resources and materials needed.
- Provide guidance and support for learners.
- Develop clear assessment rubrics.
- Provide feedback and revisions.

### Guideline to assess the research work

- *Alignment of the research work to the learning outcomes:* The research work should be aligned with the learning outcomes of the content standards. This means that the research work should allow learners to demonstrate their understanding of the course material and to develop the skills that are being taught.
- *Originality:* The research work should be original and not simply a rehash of existing information. Learners should be encouraged to develop their ideas and to come up with their conclusions.
- *Critical thinking:* The research work should demonstrate that learners can think critically about the information they have gathered.
- *Communication skills:* The research work should be well written and well-organised. Learners should be able to communicate their findings clearly and concisely.

### Cross-cutting issues are to be considered in this portfolio assessment.

*Teachers should take note of the following soft skills in assessing this research.*

21st Century Skills and Competencies	GESI and SEL	National values
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> </ul>	<ul style="list-style-type: none"> <li>• Self-reflection</li> <li>• Adaptability and resilience</li> </ul>	<ul style="list-style-type: none"> <li>• Time management skills</li> <li>• Tolerance</li> <li>• Respect</li> </ul>

<b>21st Century Skills and Competencies</b>	<b>GESI and SEL</b>	<b>National values</b>
<ul style="list-style-type: none"> <li>• Creativity and innovation</li> <li>• Analytic skills</li> <li>• Active learning competencies</li> <li>• Collaboration and teamwork</li> </ul>	<ul style="list-style-type: none"> <li>• Cooperation</li> <li>• Self-discipline</li> </ul>	<ul style="list-style-type: none"> <li>• Equity</li> <li>• Truth and integrity</li> <li>• Honesty</li> <li>• Accountability</li> <li>• Responsibility</li> <li>• Appreciation</li> <li>• Stewardship</li> </ul>



# ASSESSMENT AND TECHNOLOGY

## 8.1 The Use of Technology and Digital Tools in Assessment

### Description

Advancements in technology and digital tools can enhance the effectiveness, customisation and accessibility of assessment by simplifying assessment design, administration and grading through automated processes. Technology and digital tools could be used to facilitate online, virtual and remote assessments. Examples of technology and digital tools that could be used for assessment in schools include mobile phones/tablets, computers, WhatsApp, Telegram, Microsoft Word/Excel, SurveyMonkey, Kahoot, Google Form, Zoom and Microsoft Teams.

### Purpose

Technology and digital tools play an important role in improving the quality and efficiency of assessment practices. *Some of the purposes of the use of technology and digital tools in assessment are to:*

- Enable teachers to focus on developing flexible assessment instruments that are in line with contemporary pedagogy.
- Ensures efficiency during administration by streamlining the dissemination of tests.
- Provides automated scoring and grading systems to speed up assessment procedures while producing reliable results.
- Facilitates good data management which makes thorough analysis easier to help teachers implement their focused interventions.
- Provide prompt feedback on learners' knowledge and encourage lifelong learning.

### Setting

The use of technology in assessment is suitable for the following:

- e-Learning Platforms/Online/Learning Management Systems (LMS)
- Laboratory (virtual/simulation)
- Arts and Design Studio/theatre
- Classroom
- Computer-based testing
- e-Portfolios
- Field/workshop

### Time frame

The time frame for using technology and digital tools in assessment can vary widely depending on the specific context, the nature of the work being assessed and learners' proficiency in the use of the device or digital tools.

## **Class size**

The ideal class size for using technology and digital tools in assessment can vary from individual to small groups or whole class depending on the learning outcome and the context.

## **Steps**

### ***Before***

*The teacher should:*

- Consider learners' skills and knowledge on the use of the technology or digital tool
- Select appropriate technology or digital tools that match the learning outcomes.
- Choose relevant assessment formats that match the technology or digital tools.
- Consider the availability and cost of the technology or digital tools.
- Ensure adequate availability of devices and data for internet connectivity.
- Make provision for learners with SEN.
- Communicate how the assessment will be administered to learners (i.e., whether the learner is going to use the device)

*The learner should:*

- Be able to use the selected technology or digital tool before the actual assessment (i.e., know how to navigate, submit and perform any other features).
- Teachers should use approaches which emphasise learners' improvement rather than competition between learners.

### ***During***

*Teacher should:*

- Guide learners on accessing and joining technology or digital tools.
- Observe and ensure active participation in the use of the assessment tool.
- Support learners who require assistance in the use of technology and digital tools.

**NB:** *The teacher should give extra time to learners who may have challenges with the use of the assessment tool.*

*The learner should:*

- Adhere to instructions provided by the teacher for the specific digital tool used for the assessment.
- Actively participate in the assessment tasks.
- Identify and resolve any minor technical issues and seek assistance where necessary.
- Manage time effectively during the use of the technology or digital tool.

### ***After***

*The teacher should:*

- Communicate the results to the learner.

- Provide constructive feedback on the learner's performance and areas for improvement.
- Ensure that the technology or digital tools for the assessment are shut down and secured.

*The learner should:*

- Reflect on assessment results to improve their learning.
- Value and utilise feedback provided by the teacher to understand their strengths and areas for improvement.

## 8.2 Feedback as an Assessment Strategy

### Description

Feedback as an assessment strategy is a systematic approach that provides teachers and learners with constructive, clear, specific, and timely information on their teaching strategies and learning progress. It is used for both formative and summative purposes.

Teachers and learners should give feedback in written, verbal, non-verbal (gestures, facial expressions), pictorial form, drawings, sketches, videos, dramatise among others.

### Purpose

The purpose is to help the learner to understand their achievement and areas that need improvement. It also serves as motivation and boosts their confidence. It helps the teacher to monitor the learning progress of learners and improve their teaching strategies.

### Settings

- Classrooms
- Workshop
- Laboratories
- Virtual /online/remote
- Studios
- Field

### Time frame

The duration for providing feedback will depend on the task, purpose, the learning outcome and the number of learners in the class.

### Class Size

Feedback should be provided to individual learners, groups and the whole class.

### Steps

#### ***Before***

*The teacher should:*

- Clearly define the learning outcomes to be assessed.
- Set the assessment criteria that will be used for the feedback.

- Give feedback individually, group or whole class, depending on the nature of the feedback, the learner's needs and the class size.
- Decide the mode of communicating the feedback (e.g., written, verbal, online, one-on-one or focus group).
- Collect the learner's work (e.g., class exercises, homework, projects, presentations) that would be used as a basis for feedback.
- Carefully review and analyse the learner's work to identify strengths and areas for improvement.

*The learner should:*

- Understand the criteria for the assessment.
- Know the mode for giving feedback.
- Organise their work(s) to be used for the feedback.

### **During**

*The teacher should:*

- Guide every learner to assess themselves first through self-reflection (being mindful of GESI and SEN issues).
- Consider the socio-emotional learning needs of the learners.
- Provide constructive suggestions for the learner during the feedback process.
- Monitor the learner's progress and provide the needed support.
- Score immediately after the learner's work.
- Seek clarification on the learner's responses where necessary.

*The learner should:*

- Engage in self-reflection.
- Tolerate feedback from other learners and teachers.
- Consider feedback to improve their learning or work.
- Seek clarification on feedback promptly where necessary.

### **After**

*The teacher should:*

- Reflect on the effectiveness of the feedback and refine their strategies for future assessments.
- Give the learner a reasonable time to make corrections.

*The learner should:*

- Reflect on their progress and evaluate how the feedback has influenced their learning.
- Make their corrections based on the feedback.

**Cross-cutting issues are to be considered when providing feedback.**

*The teacher and the learner should take note of the following soft skills in using feedback.*

<b>21st Century Skills and Competencies</b>	<b>GESI and SEL</b>	<b>National values</b>
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Creativity and innovation</li> <li>• Analytic skills</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and teamwork</li> <li>• Self-reflection and self-assessment</li> <li>• Adaptability and resilience</li> </ul>	<ul style="list-style-type: none"> <li>• Truth and integrity</li> <li>• Honesty</li> <li>• Tolerance</li> <li>• Respect</li> <li>• Equity</li> <li>• Time management skills</li> </ul>

# ETHICAL CONSIDERATIONS IN ASSESSMENT

## Description

The ethical considerations related to assessment involve moral principles and professional standards that the teacher needs to adhere to in ensuring that the processes of designing, administering, scoring, interpreting and using assessment results and information are carried out in a responsible, fair, transparent and non-discriminatory manner

## Purpose

To ensure that assessments are done in a way that upholds integrity, fairness and respect for the learners being assessed and to avoid using assessment as punishment. This should be done using varied assessment strategies and tools that align with learning outcomes.

## Settings

*Assessment whether conducted internally or externally should be done ethically, fairly and in the best interest of the learner. These assessments can occur in any of the following settings:*

- School/Classroom
- Community/Home
- Fieldwork
- Laboratory/Workshops/Resource Centres/Studios
- Online /Virtual/e-Assessment/Computer-Based Assessments

## Designing and developing the assessment

*The teacher should:*

- Identify the specific learning outcome(s) to be assessed.
- State clearly the purpose of the assessment(s).
- Specify the content area (i.e. Content Standards and/or Indicators) to be assessed and align them to the learning outcome(s).
- Select an appropriate format or strategy that should be in line with the learner's characteristics, learning outcome(s) and resources.
- Design different versions (differentiated assessment) of the assessment including the use of alternative strategies of assessment.
- Avoid biased assessment tasks (e.g., tasks favouring a group of learners such as males among others).
- Avoid using unfamiliar language and materials in writing the assessment tasks.
- Adapt different versions to suit the needs of all learners. For example, make provision for learners with visual impairment by enlarging the font sizes of the assessment instrument and providing braille versions.
- Develop the marking scheme/ scoring rubrics when developing the assessment task.
- Include mark allocation on the individual questions that are given when necessary.

- Ensure that the assessment task is stored securely.
- Provide clear direction for the administration of the assessments.
- Consider logistics.

### **Administering the assessment**

*The teacher should:*

- Communicate the assessment nature/structure/format, time, content coverage and location of the assessment tasks clearly to learners.
- Ensure the setting is suitable and conducive for the assessment (e.g. lighting, ventilation, less noise among others). For learners with SEN, establish rapport and communicate in simple and clear language. Provide alternative settings for learners with SEN to meet their specific needs. (e.g. providing individualised accommodations such as writing the assessment in a separate room).
- Provide needed logistics (e.g., answer booklets, first aid, pens and pencils among others) for the assessment task. For learners with SEN make room for the use of translators, assistive devices such as hearing aids, braille, computers, recorders and other technologies that are relevant to their needs.
- Administer assessments within appropriate time limits to enhance validity and to minimise the chance of cheating. Provide additional time for learners with SEN.
- For learners with SEN, make room for varied modes such as oral, written and the use of a computer (text-to-speech and speech-to-text) among others.
- Avoid anxiety, intimidating language and unnecessary announcements.
- Provide learners with anonymous identifiers and codes instead of names to enhance reliability and validity.
- In the case of practical/performance assessments, share rubrics and marking schemes with learners.
- Ensure controlled and supervised distribution of assessment materials to avoid leaks or unauthorised sharing.

### **Scoring the assessment**

*The teacher should:*

- Consistently make use of the marking scheme/ scoring rubrics.
- Ensure multiple ratings or scoring/grading are done where necessary. (e.g., for essay-type questions, practical/performance assessment)
- Focus on the content (i.e. what is being assessed) instead of handwriting, spelling, punctuation, concord and vocabulary when scoring.
- For learners with SEN, considerations should be made for vocabulary, spelling and grammar, especially in the English language.
- Provide opportunity for remarking, review or redress where necessary.
- Record the actual scores/grades of learners as a reflection of their performance. Do not add or subtract marks based on personal influences.

- Keep the assessment results of the learners safe (either manually or digitally).
- Consider the use of professional scorers, judges or raters in the case of External Assessments.

## **Reporting and feedback in assessment**

### ***In reporting***

*The teacher should:*

- Ensure that the learner is aware of those who will be receiving the report.
- Communicate results to authorised persons such as parents/guardians and other teachers.
- Seek permission (informed consent) from the learner or parent/guardian if a third party may be involved.
- Ensure that the true performance of the learner is reported (do not manipulate or distort the results).
- Present assessment results without stereotyping or biases.
- Use language and terminology that is respectful and GESI-responsive when reporting reports.
- Provide a clear and meaningful interpretation of the assessment results.
- Adhere to legal requirements, ethical guidelines and institutional policies governing the reporting of assessment results.

### ***In feedback***

*The teacher should:*

- Provide constructive feedback timely and promptly.
- Emphasise the learner's strengths and opportunities for improvement rather than focusing solely on weaknesses.
- Ensure that the feedback given to the learner, parents/guardians and other teachers reflects the performance of the learner.
- Consider and adjust the mode of providing feedback to suit the needs of learners (consider GESI and SEN issues).
- Provide feedback based on the assessment criteria and not on personal influence.
- Avoid displaying and announcing learners' performance unofficially.
- Create opportunities for learners to readily access their results through the creation of portals, portfolios and files for individual learners and other stakeholders.
- Ensure collaborative assessment by sharing and taking the learner's information.
- Create opportunities for learners to reflect on their assessment results and learning.
- Give written comments to learners in formative assessment to help the learner track their errors and make the necessary corrections.



## Interpreting and using the assessment results

### *In interpreting,*

*The teacher should:*

- Provide clear and detailed criteria including criterion/pass mark for interpreting the assessment results.
- Avoid biases in interpreting the assessment results. Ensure result interpretation is not influenced by gender, religion, ethnicity or personal liking among others.
- Use simple and clear language in the interpretation of the assessment results.
- Interpret assessment results based on evidence and sound assessment practices.
- Ensure that the interpretation of the results accurately reflects the learner's ability, skills, competencies and knowledge.
- Ensure the learner is aware of the assessment process and the consequences of the results.

*In the use of the Assessment, The teacher should:*

- Ensure assessment results are used for their INTENDED PURPOSE, aligning with the learning outcomes.
- Seek the consent of the learner and parents/guardians before using the assessment results for any purpose.
- Ensure that assessment informs the teaching and learning process in a fair and unbiased manner and provides remediation where necessary.
- Ensure that assessment results are confidentially kept and only shared with relevant stakeholders, such as the learner, parents/guardians, and school administrators.
- Avoid using assessment results to label (name-calling), stereotype and discriminate among learners.
- Ensure that results are stored and used in a secure manner.
- Avoid discussing the learner's results and performance unofficially with others (e.g. with other teachers, staff, learners among others).

# APPENDICES

## Appendix A: Assessment Strategies Extracted from the Curriculum

	Subject	Assessment Strategies	Additional Strategies
1	Additional Mathematics	<ul style="list-style-type: none"> <li>• Oral presentation (e.g., mathematical rules and principles)</li> <li>• Multiple-choice</li> <li>• Computational drills</li> <li>• Discussion</li> <li>• Group task directed toward the solving of mathematical problems (Formative/ Summative)</li> </ul>	<ul style="list-style-type: none"> <li>• Research/Project</li> <li>• Case studies/ scenarios</li> <li>• Portfolio</li> </ul>
2.	Agricultural Science	<ul style="list-style-type: none"> <li>• Questioning</li> <li>• Oral presentation</li> <li>• Poster presentation</li> <li>• Group work</li> <li>• Discussion</li> <li>• Research/Field work</li> <li>• Individual/Group project</li> </ul>	<ul style="list-style-type: none"> <li>• Portfolio</li> <li>• Case study/scenarios</li> <li>• Concept mapping</li> <li>• Exhibitions and displays</li> <li>• Field trips (report)</li> </ul>
3	Agriculture	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Oral presentation</li> <li>• Research</li> <li>• Practical assessment (e.g., prepare a piece of land for backyard farming)</li> <li>• Group work</li> </ul>	<ul style="list-style-type: none"> <li>• Portfolio</li> <li>• Case studies/scenarios</li> <li>• Concept mapping</li> <li>• Exhibitions and displays</li> <li>• Field trips (report)</li> </ul>

	Subject	Assessment Strategies	Additional Strategies
4	Applied Technology	<ul style="list-style-type: none"> <li>• Poster presentation</li> <li>• Oral Presentation (e.g., parts of an engine and their functions)</li> <li>• Discussion (e.g., deliberating on types of Engines)</li> <li>• Individual/Group assignment</li> <li>• Demonstration of practical skills (e.g., How to dismantle an engine) (Summative Assessment)</li> <li>• Writing of reports (E.g. manual of an artifact) (Summative)</li> </ul>	<ul style="list-style-type: none"> <li>• Practical assessment</li> <li>• Research/ project/ problem-based</li> <li>• Case studies/scenarios</li> <li>• Portfolio</li> <li>• Simulation</li> </ul>
5	Arabic	<ul style="list-style-type: none"> <li>• Recitation</li> <li>• Essay</li> <li>• Discussion</li> <li>• Dramatic monologue</li> <li>• Group work</li> <li>• Drama performance</li> </ul>	<ul style="list-style-type: none"> <li>• Case study</li> <li>• Field trip</li> <li>• Concept maps</li> <li>• Debate</li> <li>• Literary critique</li> </ul>
6	Art and Design Foundation	<ul style="list-style-type: none"> <li>• Oral presentation</li> <li>• Questioning</li> <li>• Group work</li> <li>• Practical Artifact development (e.g., learners making art and design works, etc.)</li> <li>• Portfolio building</li> <li>• Research</li> <li>• Plenary discussion and peer-reviews</li> </ul>	<ul style="list-style-type: none"> <li>• Case study</li> <li>• Displays and exhibitions.</li> <li>• Field trip (report)</li> </ul>

	<b>Subject</b>	<b>Assessment Strategies</b>	<b>Additional Strategies</b>
7	Art and Design Studio	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Oral presentation</li> <li>• Questioning</li> <li>• Group work</li> <li>• Practical activities (e.g., artistic painting, etc.)</li> <li>• Research</li> <li>• Report writing (e.g., how to create art works and product)</li> <li>• Debate</li> <li>• Peer-critique</li> <li>• Puppet Show</li> </ul>	<ul style="list-style-type: none"> <li>• Case study</li> </ul>
8	Aviation and Aerospace Engineering	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Research</li> <li>• Oral presentation</li> <li>• Poster presentation</li> <li>• Laboratory practical works (e.g., manipulation of equipment)</li> <li>• Demonstration</li> <li>• Role play</li> <li>• Concept mapping</li> <li>• Group work</li> <li>• Report writing (e.g., report about aviation surveillance)</li> </ul>	<ul style="list-style-type: none"> <li>• Case study</li> <li>• Simulation</li> <li>• Field trip</li> </ul>
9	Biology	<ul style="list-style-type: none"> <li>• Observation</li> <li>• Discussion</li> <li>• Research</li> <li>• Oral presentation</li> <li>• Simulations</li> </ul>	<ul style="list-style-type: none"> <li>• Project</li> <li>• Portfolio</li> <li>• Case studies/scenarios</li> <li>• Practical assessment</li> <li>• Interviews</li> <li>• Field trip</li> <li>• Laboratory work/ experiment</li> </ul>

	<b>Subject</b>	<b>Assessment Strategies</b>	<b>Additional Strategies</b>
10	Biomedical Science	<ul style="list-style-type: none"> <li>• Questioning</li> <li>• Discussion</li> <li>• Role play</li> <li>• Group work</li> <li>• Laboratory experiment</li> <li>• Research</li> <li>• Oral presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Project</li> <li>• Portfolio</li> <li>• Case studies/scenarios</li> <li>• Practical assessment</li> <li>• Interviews</li> <li>• Field trip</li> </ul>
11	Business Studies	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Multiple-choice</li> <li>• Discussion</li> <li>• Report writing</li> <li>• Oral presentation</li> <li>• Role play</li> <li>• Group work</li> <li>• Practical activity (e.g., prepare a ledger book, etc.)</li> <li>• Case studies/scenarios</li> </ul>	<ul style="list-style-type: none"> <li>• Portfolio</li> <li>• Interviews</li> <li>• Field trip</li> <li>• Questioning</li> <li>• Project</li> </ul>
12	Chemistry	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Discussion</li> <li>• Laboratory experiment</li> <li>• Research</li> <li>• Group work</li> </ul>	<ul style="list-style-type: none"> <li>• Project</li> <li>• Portfolio</li> <li>• Case studies/scenarios</li> <li>• Practical activity</li> <li>• Interviews</li> <li>• Field trip</li> <li>• Laboratory work/ experiment</li> </ul>
13	Computing	<ul style="list-style-type: none"> <li>• Questioning</li> <li>• Oral presentation</li> <li>• Project</li> <li>• Group activity</li> <li>• Video Analysis</li> <li>• Discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Modelling</li> <li>• Case study</li> <li>• Research</li> <li>• Portfolio</li> <li>• Practical activities/ assessment</li> </ul>

	Subject	Assessment Strategies	Additional Strategies
14	Science	<ul style="list-style-type: none"> <li>• Research</li> <li>• Oral presentation</li> <li>• Simulations</li> <li>• Report writing</li> <li>• Group work</li> </ul>	<ul style="list-style-type: none"> <li>• Project</li> <li>• Portfolio</li> <li>• Case studies/scenarios</li> <li>• Practical assessment</li> <li>• Interviews</li> <li>• Field trip</li> <li>• Questioning</li> <li>• Laboratory experiment</li> </ul>
15	Elective Physical Education and Health	<ul style="list-style-type: none"> <li>• Plenary discussion and peer-critique</li> <li>• Oral presentation</li> <li>• Portfolio</li> <li>• Role play</li> <li>• Group work</li> <li>• Practical assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Project</li> <li>• Case studies/scenarios</li> <li>• Interviews</li> <li>• Field trip/work</li> <li>• Questioning</li> <li>• Laboratory experiment</li> <li>• Simulation</li> <li>• Games</li> <li>• Observations/checklist</li> </ul>
16	Core Physical Education and Health	<ul style="list-style-type: none"> <li>• Plenary discussion and peer-critique</li> <li>• Portfolio</li> <li>• Role play</li> <li>• Group work</li> <li>• Discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Project</li> <li>• Case studies/scenarios</li> <li>• Interviews</li> <li>• Field trip/work</li> <li>• Questioning</li> <li>• Laboratory experiment</li> <li>• Simulation</li> <li>• Games</li> <li>• Observations/checklist</li> </ul>
17	Economics	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Role play</li> <li>• Dramatization</li> <li>• Project</li> <li>• Oral presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Portfolio</li> <li>• Interviews</li> <li>• Field trip</li> <li>• Questioning</li> <li>• Project</li> <li>• Case study</li> </ul>

	<b>Subject</b>	<b>Assessment Strategies</b>	<b>Additional Strategies</b>
18	Engineering	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Presentation</li> <li>• Project</li> <li>• Group work</li> <li>• Research</li> </ul>	<ul style="list-style-type: none"> <li>• Modelling</li> <li>• Case study</li> <li>• Portfolio</li> <li>• Practical activities/ assessment</li> <li>• Field trip</li> <li>• Simulation</li> </ul>
19	English Language	<ul style="list-style-type: none"> <li>• Questioning</li> <li>• Recitations</li> <li>• Research</li> <li>• Discussion</li> <li>• Dramatic monologue</li> <li>• Debate</li> <li>• Group work</li> </ul>	<ul style="list-style-type: none"> <li>• Case study</li> <li>• Field trip</li> <li>• Concept maps</li> <li>• Debate</li> <li>• Literary critique</li> <li>• Journals/Portfolio</li> <li>• Miming/Role play</li> <li>• Dramatisation</li> <li>• Translation/ interpretation</li> <li>• Essay/summary/ comprehension</li> <li>• Multiple-choice</li> <li>• Oral/aural</li> </ul>
20	French	<ul style="list-style-type: none"> <li>• Questioning</li> <li>• Demonstration</li> <li>• Dramatisation</li> <li>• Group work</li> <li>• Project work</li> <li>• Debate</li> <li>• Oral presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Case study</li> <li>• Field trip</li> <li>• Concept maps</li> <li>• Literary critique</li> <li>• Journals/Portfolio</li> <li>• Miming/Role play</li> <li>• Translation/ interpretation</li> <li>• Essay/summary/ comprehension</li> <li>• Multiple-choice</li> <li>• Oral/aural</li> </ul>

	<b>Subject</b>	<b>Assessment Strategies</b>	<b>Additional Strategies</b>
21	Geography	<ul style="list-style-type: none"> <li>• Mind-mapping</li> <li>• Questioning</li> <li>• Discussion</li> <li>• Project</li> <li>• Group Work</li> </ul>	<ul style="list-style-type: none"> <li>• Case study</li> <li>• Field work</li> <li>• Concept maps</li> <li>• Portfolio</li> <li>• Essay/Multiple-choice</li> <li>• Observation</li> <li>• Poster presentation</li> <li>• Research</li> <li>• Graph/charts/ diagrams</li> </ul>
22	Ghanaian Language	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Think-pair-share</li> <li>• Discussion</li> <li>• Questioning</li> <li>• Group work</li> <li>• Demonstration</li> <li>• Role play</li> </ul>	<ul style="list-style-type: none"> <li>• Case study</li> <li>• Field work</li> <li>• Concept maps</li> <li>• Literary critique</li> <li>• Journals/Portfolio</li> <li>• Miming/Role play</li> <li>• Translation/ interpretation</li> <li>• Essay/summary/ comprehension</li> <li>• Multiple-choice</li> <li>• Oral/aural</li> </ul>
23	Government	<ul style="list-style-type: none"> <li>• Questioning</li> <li>• Role play</li> <li>• Discussion</li> <li>• Oral presentation</li> <li>• Research</li> </ul>	<ul style="list-style-type: none"> <li>• Case study</li> <li>• Field work</li> <li>• Concept maps</li> <li>• Portfolio</li> <li>• Essay/Multiple-choice</li> <li>• Observation</li> <li>• Poster presentation</li> <li>• Research</li> <li>• Debate</li> <li>• Charts/graphs/ diagrams</li> </ul>



	<b>Subject</b>	<b>Assessment Strategies</b>	<b>Additional Strategies</b>
24	History	<ul style="list-style-type: none"> <li>• Oral presentation</li> <li>• Role play</li> <li>• Group work</li> <li>• Essay</li> </ul>	<ul style="list-style-type: none"> <li>• Case study/scenarios</li> <li>• Field work</li> <li>• Project</li> <li>• Concept maps</li> <li>• Portfolio</li> <li>• Essay/Multiple-choice</li> <li>• Observation</li> <li>• Poster presentation</li> <li>• Research</li> <li>• Debate</li> <li>• Charts/graphs/ diagrams</li> </ul>
25	Home Economics	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Group work</li> <li>• Experiment</li> <li>• Practical exercise</li> </ul>	<ul style="list-style-type: none"> <li>• Field work</li> <li>• Project</li> <li>• Concept maps</li> <li>• Portfolio</li> <li>• Essay/Multiple-choice</li> <li>• Observation</li> <li>• Poster presentation</li> <li>• Research</li> <li>• Debate</li> <li>• Modelling</li> <li>• Case study/scenarios</li> </ul>
26	Intervention English	<ul style="list-style-type: none"> <li>• Pick and Say Game</li> <li>• Discussion</li> <li>• Audio review</li> <li>• Text review</li> <li>• Research</li> </ul>	
27	Intervention Mathematics	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Computational drills</li> <li>• Group work</li> </ul>	

	<b>Subject</b>	<b>Assessment Strategies</b>	<b>Additional Strategies</b>
28	Mathematics	<ul style="list-style-type: none"> <li>• Group work</li> <li>• Project</li> <li>• Computational exercise</li> </ul>	
29	Literature in English	<ul style="list-style-type: none"> <li>• Oral presentation</li> <li>• Report writing</li> <li>• Group work</li> <li>• Role play</li> <li>• Dramatization</li> </ul>	
30	Manufacturing Engineering	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Group work</li> <li>• Practical activities</li> <li>• Research</li> <li>• Laboratory experiment</li> </ul>	
31	ICT	<ul style="list-style-type: none"> <li>• Research</li> <li>• Discussion</li> <li>• Oral presentation</li> <li>• Multimedia presentation</li> <li>• Demonstration</li> </ul>	
32	Spanish	<ul style="list-style-type: none"> <li>• Questioning</li> <li>• Demonstration</li> <li>• Group work</li> <li>• Project work</li> <li>• Debate</li> <li>• Oral presentation</li> </ul>	
33	Performing Arts	<ul style="list-style-type: none"> <li>• Research</li> <li>• Demonstration</li> <li>• Oral presentation</li> <li>• Project work</li> <li>• Role play</li> <li>• Group work</li> </ul>	

	Subject	Assessment Strategies	Additional Strategies
34	Physics	<ul style="list-style-type: none"> <li>• Research</li> <li>• Experiment</li> <li>• Project</li> <li>• Simulation</li> <li>• Virtual laboratory</li> <li>• Oral presentation</li> </ul>	
35	Religious Studies	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Research</li> <li>• Group work</li> <li>• Debate</li> <li>• Role play</li> <li>• Oral presentation (e.g., oral histories of events)</li> </ul>	
36	Religious & Moral Education (RME)	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Case study</li> <li>• Discussion</li> <li>• Oral presentation</li> <li>• Dramatization</li> <li>• Group work</li> </ul>	
37	Robotics	<ul style="list-style-type: none"> <li>• Video analysis</li> <li>• Oral presentation</li> <li>• Discussion</li> <li>• Group work</li> <li>• Research</li> <li>• Practical activity</li> </ul>	

	Subject	Assessment Strategies	Additional Strategies
38	Social Studies	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Research</li> <li>• Group work</li> <li>• Journal entry worksheet</li> <li>• Questioning</li> <li>• Role play</li> <li>• Newspaper analysis</li> <li>• Oral presentation</li> <li>• Debate</li> </ul>	

### A.1 Assessment Strategies for Learners with Special Education Needs (SEN)

	Variations of Educational Needs	Assessment Strategies
1	Mathematics difficulty (LN)	<ul style="list-style-type: none"> <li>• Portfolio</li> <li>• Task analysis</li> <li>• Work sample</li> <li>• Questioning</li> <li>• Group work</li> <li>• Class exercise</li> </ul>
2	Reading difficulty (LN)	<ul style="list-style-type: none"> <li>• Inventory</li> <li>• Ecological assessment</li> <li>• Portfolio</li> <li>• Discussion</li> <li>• Group work</li> <li>• Case studies</li> <li>• Role play</li> <li>• Dramatisation</li> <li>• Class exercise</li> </ul>
3	Writing difficulty (LN)	<ul style="list-style-type: none"> <li>• Portfolio</li> <li>• Ecological assessment</li> <li>• Work sample</li> <li>• Group work</li> <li>• Class exercise</li> </ul>

	Variations of Educational Needs	Assessment Strategies
4	Visual needs	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Interview</li> <li>• Debate</li> <li>• Critique (both oral and written)</li> <li>• Group work</li> <li>• Class exercise</li> <li>• e-Assessment</li> </ul>
5	Hearing needs	<ul style="list-style-type: none"> <li>• Performance assessment</li> <li>• Observation</li> <li>• Poster</li> <li>• Demonstration</li> <li>• Debate</li> <li>• Group work</li> <li>• e-Assessment (e.g., visual assessment)</li> </ul>
6	Communication needs	<ul style="list-style-type: none"> <li>• Portfolio</li> <li>• Task analysis</li> <li>• Teacher made achievement test</li> <li>• Poster</li> <li>• Demonstration</li> <li>• Group work</li> <li>• Class exercise</li> </ul>
7	Gifted and Talented	<ul style="list-style-type: none"> <li>• Research</li> <li>• Project</li> <li>• Oral presentation</li> <li>• Poster</li> <li>• Dramatic monologue</li> <li>• Debate</li> <li>• Discussion</li> <li>• Group work</li> <li>• Classroom</li> <li>• Performance assessment</li> <li>• Practical activity</li> </ul>

## **A.2 Depth of Knowledge Levels (Learning Outcomes)**

### **DoK 1: Reproduction/Recall**

Learners will develop and demonstrate foundational knowledge and functional understanding of concepts, content, and procedures.

### **DoK 2: Skills/Concepts**

Learners will demonstrate and communicate their conceptual and procedural understanding. Learners are challenged to establish and explain reasons, relationships, or results using their knowledge and skills.

### **DoK 3: Extended Thinking/Reasoning**

Learners use complex reasoning supported by evidence to defend, explain, justify, or refute arguments, claims, conclusions, decisions, hypotheses, ideas, or reasoning.

### **DoK 4: Strategic Thinking/Reasoning**

Learners use transfer, use, and share what they have learned in different contexts, new situations, or address, explain, and respond to a real-world scenario or situation.

### **21st Century skills and Competencies**

Critical thinking, creativity, collaboration, communication, information literacy, media literacy, technology literacy, flexibility, leadership, initiative, productivity, and social skills are needed.

### **GESI/SEL/SEN**

Appreciate their uniqueness about others, pay attention to the uniqueness and unique needs of others, value the perspective, experience, and opinion of others, respect individuals of different beliefs, political views/ leanings, cultures, and religions, embrace diversity and practice inclusion, value and work in favour of a democratic and inclusive society, etc.

## Appendix B: Assessment Toolkit

### B.1 Learners with Special Educational Needs

#### Introduction

The categories of special educational needs (SEN) in Ghana's 2015 inclusive education (IE) policy encompass several labels including learning disabilities (LDs), intellectual disabilities (IDs), emotional and behavioural disorder (EBDs), autism spectrum disorders (ASDs), attention deficit hyperactive disorders (ADHD), hearing impairment (HI), visual (VI) impairment, intellectual disabilities (IDs), communication disorders (CDs), physical and health impairment (P&IH) among others, however, considering the Senior High School (SHS) and the Senior Technical School level (SHTS), attention will be paid to the gifted and talented as well as the categories of SEN that are considered as high incidence (e.g., learning disabilities, communication disorders, visual impairment, hearing impairment, emotional and behavioural disorders, autism spectrum disorders).

#### Identification of learners with SEN

In line with the IE policy, the class teacher in collaboration with other teachers can identify learners who may require special education needs and have the names of the learners listed in the school's register for the learners to receive special attention in both the formative and the summative assessment process.

1. The identification of learners with SEN should be done in year 1, term 1
2. The period of assessment should span within a period of 8 weeks.
3. The headteacher can authenticate the list of learners with SEN after holding a meeting with the teachers.
4. Learners who may require diagnosis from professionals should be referred via the special educational needs co-ordinator (SENCO).
5. Resources such as audios, visuals and audio-visual should be made available for learners who may require them (e.g., VI, HI, LDs).
6. Teachers can identify the categories of SEN using informal assessment tools such as interviews, observation, work sample analysis, checklist, and the criterion referenced test (CRT) because of the following reasons:
  - i. It will help to determine the needs of the learner.
  - ii. Information gathered can guide the teacher in planning lessons.
  - iii. The mode of assessing the learner will not be limited to testing (cognitive) but assessing other relevant areas such as the behaviour and social skills of the learner.

#### How to identify the conditions of SEN in the classroom

The teacher can look out for the following signs in assessing learners suspected of having SEN.

##### 1. Learning needs

- Easily forgetting what is taught (short attention span)
- Low academic achievement (English Language, math, science, social studies, etc)
- Math underachievement

- Difficulty in decoding (word identification) and comprehending a text.
- Difficulty in comprehending what is taught.
- Limited vocabulary
- Poor written expression
- Low self esteem
- Showing signs of dependency (e.g., asking for repetition of instructions, copying from friends, seeking assistance from the teacher) in assigned tasks.
- Avoiding group task
- Poor handwriting
- Shows ability in specific areas but performs poorly in other areas (e.g., do well in English but not Math)

## 2. Behavioural needs

- Lateness to class
- Absenteeism
- Fighting
- Disrespect
- Immaturity (childish behaviour, interest in younger playmates)
- Substance abuse
- Gang membership
- Failure to complete assignments
- Poor attention during class discussion
- Failure in following rules and regulations
- Poor management of study time
- Unwillingness to engage in group discussions

## 3. Gifted and talented needs

- High intellectual ability (has high scores in all subjects)
- Learns quickly
- Good socialisation skills (relates well with other)
- Shows leadership qualities
- Good communication skills (e.g., fluent in oral presentations)
- Independent in learning (requires less or no guidance in task accomplishment)
- Exhibits creative skills (e.g., sports, music, poetry etc.).
- Good self esteem
- Shows maturity
- Exhibits critical thinking skills



- Retains learned information and applies in another context

#### 4. **Communication needs**

*The learner:*

- can hardly be heard when talking (low voice pitch)
- talks through the nose (hypernasality)
- talks as if she/he has cold
- repeats or mispronounces sounds
- makes hesitations and interjections in verbal expressions
- mispronounces sounds
- substitutes sounds and words (e.g., bring as bling)
- omits sounds (e.g., eat instead of heat)
- has limited vocabulary
- makes a lot of grammatical errors (e.g., tenses)
- has difficulty expressing himself/herself in written work (written task may lack coherency)
- has difficulty understanding what she/he reads
- challenges speaking in the English language
- inappropriate use of words

#### 5. **Social needs**

- Avoids eye contact
- Prefers to be alone rather than interacting with peers
- Unwillingness to participate in group task

#### 6. **Visual needs**

- Rubbing of the eyes
- Excessive blinking of the eyes
- Cannot read small prints
- Reading materials may be held too close or far from the eyes
- Crossed eyes
- Unusual eye colour (reddish or yellowish)
- Watery eyes
- Swollen eye lids
- Extreme care in movement

## 7. Hearing needs

- Lip reading
- Talking too loud or too low
- Lack of clarity in speech/difficulty in pronouncing some speech sounds
- Prefers visual activities than aural activities
- Asking for repetition from the speaker
- Difficulty taking turns in conversation
- Relying on non-verbal communication
- Difficulty following simple oral instructions
- Repeats oral information wrongly

### Points to consider for learners with SEN when using the assessments strategies in the classroom

1. Clarify, simplify, explain, or translate directions for the learner.
2. Provide materials in braille /enlarged format for the learner with visual needs.
3. Explain unfamiliar words and provide simplified alternative instructions for learners with hearing needs.
4. Allow learners to respond either orally or in a written format based on their needs (make considerations for braille and sign language)
5. Read aloud for the learner if they have difficulty in reading.
6. Provide additional time for learners who may require it.
7. Provide assessment feedback in simplified language for them.
8. Give them additional guidance during the assessment process.
9. Allow the learner to have intermittent breaks during the assessment process (especially for assessment with long duration, e.g., above 1 hour)
10. Give learners the opportunity to use specialised equipment (e.g., assistive technologies such as hearing aids, computers, that are relevant to their needs)
11. Provide questions and answers to guide learners during self-assessment and self-reflection.

## B.2 How to Identify Learners who are Gifted and Talented

### Description

Identifying learners who are gifted and talented involves recognising and acknowledging learners who demonstrate exceptional abilities in one or more areas such as academics, creativity, leadership, or the arts. In this process, a variety of tools, observations, and performance indicators should be used to identify gifted and talented learners for differentiated instruction and assessment. Gifted and Talented learners show evidence of high-achievement capability in areas such as intellectual, creative, artistic, or leadership capacity or in specific academic fields who need support to fully develop their potential.

They often have a high level of curiosity, creativity, and motivation to learn and explore beyond what is typically expected for their age or grade level.

**NB:** *The teacher, parent/guardians, learner (peer/self) should be involved in the identification of 'giftedness and talentedness'.*

*The purpose of the toolkit is to help the teacher to:*

- Gain the requisite knowledge and skills on how to assess gifted and talented learners and offer them extra enrichment support.
- Identify the characteristics of learners who are gifted and talented to include them in the teaching and learning and assessment process by providing them with engaging and high order challenging tasks.
- Support gifted and talented learners with the necessary educational experiences that are appropriately challenging and tailored to meet their specific needs.
- Use formative and summative assessment procedures appropriately.
- Offer some educational support such as grade skipping, giving them more tasks than their peers, and differentiating their tasks.

### **Settings**

- Classroom/school
- Home/Community
- Field work
- Laboratory/Workshops/Resource Centres/Studios
- Online/Virtual

### **Class size**

Identification of learners who are gifted and talented should be done individually.

### **Time frame**

Upon entry into SHS 1 and throughout the period of study.

### **Steps**

*The teacher should:*

- Have in depth knowledge in identifying learners who are gifted and talented.
- Engage colleague teachers, peers, and parents/guardians in the identification process.
- Indicate the mode for the identification process (e.g., the use of observation, checklist, interview, portfolios, work samples among others.)
- List the names of the learners who should be part of the identification process.
- Screen to determine learners who can be considered as being gifted and talented.
- Refer learners who may need thorough evaluation to professionals through District Inclusive Education Team (DIET) or District Assessment Team (DIAT)
- Recognise GESI during the identification of learners who are gifted and talented.

*The learner should:*

- Recognise their special gift and talents such as critical thinking, self-reflection, creativity, leadership ability, artistic skills among others.
- Make available their work samples and show superiority in cognitive and creative tasks.
- Provide adequate information to the teacher during interviews.

### **Characteristics of the learner who is gifted and talented**

*The learner should have the following characteristics:*

1. High intellectual ability (has high scores in most subjects)
2. Learn quickly.
3. Able to relate well with both peers and adults.
4. Able to take leadership roles.
5. Well-developed vocabulary and good oral fluency.
6. Requires less or no guidance in task accomplishment.
7. Exhibit problem-solving skills, generate new ideas and easily adapt to situations (e.g., sports, music, poetry, composition, etc.)
8. High self-confidence and self-esteem
9. Exhibits critical thinking skills. \*\*\* See Critical thinking toolkit.
10. Retains learned information and applies it in other contexts.
11. Often asks questions and seeks for clarification of information.
12. Do not give up easily on a task/an activity showing a high level of resilience.
13. Sets clear goals and achieves them.

### **How to assess the learner who is gifted and talented**

*The teacher should:*

- Define and align assessment to the learning outcome.
- Use a variety of assessment tools and strategies including teacher-made tests, performance tasks, portfolios, online assessment platforms among others (look out for learners with higher scores)
- Consider assessment strategies that will suit the unique abilities of the learner.
- Put in appropriate interventions to help solve learners' challenges.
- Engage learners in complex, real, performance-based, open-ended, projects among others to assess learners.
- Use formative assessment to determine learners' progress over time.
- Collaborate with other stakeholders (other teachers, parents/guardians, siblings, peers and other relevant individuals) during the enrichment stage.

### B.3 Checklist For Identifying Learners Who Are Gifted And Talented

Characteristics of the learner who is gifted and talented The learner:	YES	NO
Shows high intellectual ability (has high scores in most subjects).		
Learns concepts and ideas faster than their peers.		
Can relate well with both peers and adults.		
Has a high level of leadership skills.		
Has well-developed vocabulary and good oral fluency		
Learns independently and often stay on challenging tasks till it is accomplished.		
Easily generates new ideas to solve real-life problems.		
Usually demonstrates a high level of self-confidence and self- esteem.		
Easily adapts to new situations, contexts, and ideas.		
Demonstrates a high level of retaining learned content and applies the same in other contexts.		
Often asks questions and seeks for clarification on a subject matter/ concepts.		

### B.4 Internal Assessment Practices

SN	Type	Uses	Examples
1	Diagnostic Assessment	<ul style="list-style-type: none"> <li>To identify the learner's strengths and weaknesses in a subject</li> <li>To help clarify misconceptions before teaching and learning begin.</li> <li>To help teachers plan what to teach and how to teach it.</li> </ul>	<ul style="list-style-type: none"> <li>Self-assessment to identify skills and competencies.</li> <li>Posters/Discussion board responses on content- specific prompts</li> <li>Out-of-level assessments (asking lower or higher grade-level questions)</li> <li>Teacher-learner conferences</li> <li>Think-aloud protocols</li> <li>Observation schedules</li> <li>Conversations and dialogues</li> <li>Group discussions</li> <li>Interviews (individual or group)</li> <li>Learner survey</li> <li>Pre-tests</li> </ul>

SN	Type	Uses	Examples
2	Formative Assessment (AfL & AaL)	<ul style="list-style-type: none"> <li>• To provide feedback and information during the instructional process, while learning is taking place.</li> <li>• To help teachers guide learners to develop internal feedback or self-monitoring mechanisms.</li> <li>• To identify areas of learning that may need improvement.</li> <li>• To provide opportunities to develop more constructive views about how learners can adjust to different learning situations.</li> <li>• To focus on the process of achieving the curriculum goals and standards.</li> </ul>	<ul style="list-style-type: none"> <li>• Observations during in-class activities (including non- verbal feedback)</li> <li>• Homework exercises for class discussions</li> <li>• Take-home tests</li> <li>• Reflection journals that are reviewed periodically during the term</li> <li>• Concept maps</li> <li>• Question and answer sessions (formal and informal)</li> <li>• In-class activities and presentations (both individual and group)</li> <li>• Self- and Peer-assessment</li> <li>• Project and research</li> <li>• Teacher-learner conferences</li> <li>• Seminars to discuss research/ project reports.</li> <li>• Portfolios/works in progress</li> <li>• Field trips</li> <li>• Inventories and questionnaires/ surveys</li> <li>• Pop quizzes</li> <li>• Checklist/Rating scales/ Rubrics</li> <li>• Practical assessment</li> <li>• Role play/ demonstrations/ performance assessment</li> <li>• Open-book/Open-source assessments</li> </ul>

SN	Type	Uses	Examples
3	Summative Assessment (AoL)	<ul style="list-style-type: none"> <li>To report learner progress to parents, school, district, regional and national authorities.</li> <li>To report learner performance to external authorities such as tertiary institutions.</li> <li>To grade learners' achievements for certification, selection, or placement.</li> <li>To determine the learner's progression to the next grade level.</li> </ul>	<ul style="list-style-type: none"> <li>End-of-term examinations</li> <li>End-of-year examinations</li> <li>End-of-programme examinations</li> <li>Quizzes</li> <li>Project Work</li> <li>Test of practical</li> <li>Class test (written, oral, aural and/or practical)</li> <li>Term papers</li> <li>Research</li> <li>Portfolios</li> <li>Performance assessment</li> <li>Practicum/ Industrial attachment</li> </ul>
4	Performance-based Assessment	<ul style="list-style-type: none"> <li>To determine how well learners can apply or use what they know, often in real-world situations.</li> <li>To demonstrate an understanding of knowledge, skills, competencies, attitudes, values, and character qualities.</li> </ul>	<ul style="list-style-type: none"> <li>Exhibitions/Fairs</li> <li>Experiments</li> <li>Writing Long Essays</li> <li>Seminars/Discussions/ Debates</li> <li>Reflective Journals</li> <li>Demonstrations</li> <li>Presentations</li> <li>Performances/Show</li> <li>Oral Assessments</li> </ul>

## B.5 Critical Thinking Skills and Assessment

Learners who engage in critical thinking skills could analyse rationally and understand the logical connections between ideas. They could consider different perspectives, evaluate arguments, and make informed decisions. Assessment tasks, therefore, should consider how to elicit these skills and behaviour in learners.

### Teachers' role in integrating critical thinking skills in assessment.

*Teacher should:*

- Ask open-ended questions that require learners to think deeply and provide reasons for their responses.
- Facilitate debates that encourage exploration of different perspectives.
- Encourage learners to use evidence to support their opinions.

- Assign collaborative projects for learners to use their knowledge and understanding to solve problems.
- Give learners adequate time for reflection after learning activities.
- Let learners make choices and take full responsibility for their choices.
- Use multiple assessment strategies in teaching and learning to assess critical thinking skills.

### Learners' role

Learners should demonstrate the following skills and behaviour.

S/N	Critical thinking attributes (Skills/ Behaviours) the learner demonstrates	Response	
		Yes	No
1	Uses reasoning to come to a logical conclusion		
2	Asks questions for clarification and further understanding of ideas and concepts		
3	Seeks and considers multiple perspectives and points of view		
4	Questions norms, practices, and opinions, to reflect on values, perceptions, and actions		
5	Connects pieces of information that are not explicitly stated to draw a conclusion		
6	Makes guesses or predictions based on evidence		
7	Uses criteria to evaluate information for relevance and accuracy		
8	Questions different parts of an argument or ideas effectively		
9	Sees challenging tasks or real-life problems as exciting		
10	Integrates multiple sources of information to form a comprehensive understanding or interpretation of a problem		
11	Engages in self-reflection where they review and adjust their thought processes		
12	Shows willingness to reconsider and revise views		
13	Adjust their perspectives considering new evidence		



## Appendix C: Exemplars for Assessment Strategies

### C.1 Portfolio as an Assessment Strategy in Science

#### Description

Science portfolio assessment is a method to evaluate learners' science skills and knowledge by collecting and reviewing their work overtime. It includes various items like research papers, lab reports, experiments, and presentations, allowing learners to demonstrate their scientific understanding through diverse artefacts and reflections.

Some scientific concepts from the core science curriculum that can be assessed using portfolios are;

1. Cell structure and function
2. Biotechnology
3. Climate change
4. Characteristics of science
5. Water cycle
6. Photosynthesis
7. Cellular respiration.

#### Purpose

The objective of implementing a science portfolio assessment strategy is to provide students with an opportunity to exhibit their progress in diverse scientific domains, evaluate their critical thinking and other abilities using a range of artefacts, encourage the practical application of scientific ideas, foster introspection and metacognition, and improve their communication and teamwork abilities in science classes.

#### Setting

*Teachers can assess science portfolios in the following settings:*

- Classroom.
- Science Laboratory
- Fieldwork
- Online or e-portfolio
- Science fairs

#### Steps in designing a portfolio assessment in science

The example is extracted from the core science curriculum. Strand: Exploring materials sub-strand: Science and Materials in Nature

1. The purposes of this portfolio assessment are:
  - To enable teachers to ascertain how learners have mastered using the characteristics of science to come up with innovative ideas to solve problems.
  - This will also deepen the understanding of learners and develop their research and inquiry skills.

2. The learning outcome for this portfolio assessment is: Evaluate the characteristics of science.
3. The instructions for collecting, selecting, reflecting, reviewing, and submitting this portfolio based on the learning outcomes are:
  - Collect materials which include footage of experiments of field work, videos, visual analysis of concepts,
  - Gather relevant data for characteristics of science (e.g., reports, data sets on experiments, survey charts, and graphs that showcase the understanding and application of scientific characteristics).
  - Select five characteristics of science and provide a rationale for your choices.
  - Explain the scientific concepts you plan to use, provide clear steps and explanations and analyze and discuss the applicability of using it to design the project.
4. In submitting the portfolio:
  - Organize your portfolio with an introduction, an explanation of the characteristics of science and how one can make a design with it and state the conclusion.
  - Include supporting materials like charts, tables, or any relevant documents, and reflect on your learning and how you can apply the characteristics of science to solve real-world problems.
5. The teacher and learner decide on what will be included in this portfolio. *Learners should include the following: a design portfolio plans, reports, data set on experiments, surveys charts, and graphs that showcase the understanding and application of scientific characteristics)*
6. The teacher and learners discuss the standards of performance/scoring criteria (e.g., a rubric) to assess the progress of learning and provide constructive feedback.

**Time frame**

Based on the learning outcome the appropriate time frame for this portfolio is a month.

**Class size**

- Individual learner's portfolios when the class size is relatively small.
- Group portfolio when the size is relatively large.

### Cross-cutting issues to be considered in this portfolio assessment.

*Teachers should take note of the following soft skills in assessing this portfolio.*

21 <sup>st</sup> Century Skills and Competencies	GESI and SEL	National values
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Creativity and innovation</li> <li>• Analytic skills</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and teamwork</li> <li>• Self-reflection and self-assessment</li> <li>• Adaptability and resilience</li> </ul>	<ul style="list-style-type: none"> <li>• Time management skills</li> <li>• Tolerance</li> <li>• Respect</li> <li>• Equity</li> <li>• Truth and integrity</li> </ul>

## Portfolio as an Assessment Strategy in Mathematics

### Description

A portfolio assessment in mathematics is a systematic collection of a learner's samples of work to provide a complete picture of their mathematical abilities, skills and competencies in the subject, with a focus on the application of mathematical concepts and problem-solving abilities.

*Mathematical concepts and ideas found in sub-strands such as:*

- Real Numbers
- Proportional reasoning
- Application of expression, equation and inequalities
- Patterns and relationships
- Measurement
- Statistical reasoning and its application in real-life

### Purpose

Portfolio assessment in mathematics provides a comprehensive evaluation of a learner's mathematical knowledge, skills, and understanding, and assists in setting goals for their mathematics learning.

### Setting

*A mathematics teacher can use portfolio assessment in the following settings:*

- Classroom-based assessment
- Mathematics Clubs
- Fieldwork
- Mathematics Laboratory/Resource Centre

## Steps

*The example is extracted from the mathematics curriculum. Strand: Numbers for Everyday Life sub-strand: Real Number System*

1. The purposes of this portfolio assessment are:
  - To enable teachers to track learners' mastery of creating their strategies to solve percent problems involving personal and family finances. This will be used for teaching and learning.
  - To help learners reflect on their learning.
2. The learning outcome for this portfolio assessment is:
  - The Learner creates strategies for solving percent problems involving personal or household finances.
3. The instructions for learners in collecting, selecting, reflecting, reviewing, and submitting this portfolio based on the learning outcomes are:
  - Collect real-life personal finance scenarios involving percent problems (e.g., taxes, savings).
  - Gather relevant data for each scenario (e.g., receipts, financial statements).
  - Select three (optional) specific scenarios and provide a rationale for your choices.
4. Explain the mathematical concepts, formulas, or techniques you plan to use, provide clear steps and calculations, and analyze and discuss the effectiveness of each strategy in achieving desired financial goals.
5. In submitting the portfolio, the following should be done:
  - Organize your portfolio with an introduction, three distinct scenario sections, and a conclusion.
  - Include supporting materials like calculations, graphs, tables, or any relevant documents, and reflect on your learning and how you can apply these skills to personal finance in the future.
6. The teacher and learner decide on what will be included in this portfolio.
7. Learners should include the following: a design portfolio plans, data on percentages on personal and family finances, reports on data analysis, copies of utility bills, family budget, school fees, and self-appraisal reports.
8. The teacher and learners discuss the standards of performance/scoring criteria (e.g., a rubric) to assess the progress of learning and provide constructive feedback.

## Time frame

Based on the learning outcome the appropriate time frame for this portfolio is a week.

## Class size

- Individual learner's portfolios when the class size is relatively small.
- Group portfolio when the size is relatively large.

**Cross-cutting issues are to be considered in this portfolio assessment.**

*Teachers should take note of the following soft skills in assessing this portfolio.*

21st Century Skills and Competencies	GESI and SEL	National values
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Critical thinking and problem-solving skills</li> <li>• Creativity and innovation</li> <li>• Analytic skills</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and teamwork</li> <li>• Self-reflection and self-assessment</li> <li>• Adaptability and resilience</li> </ul>	<ul style="list-style-type: none"> <li>• Time management skills</li> <li>• Tolerance</li> <li>• Respect</li> <li>• Equity</li> <li>• Truth and integrity</li> </ul>

## C.2 Exemplar for Performance Assessment

*Subject:* Robotics

*Strand:* Robot Design Methodologies

*Sub-strand:* Digital and Analogue System Design

*Learning outcome:* Assemble electronic circuits from schematic diagrams and analyse their application in discrete and continuous time machine design.

*Content standard:* Demonstrate practical skills in assembling electronic circuits. Learning indicator: Assemble and test electronic circuits on a solderless breadboard using pre-designed schematic diagrams.

### **Purpose:**

- Examine learners' ability to make use of their knowledge and understanding to create a performance product.
- To generate classroom data on which the preparation of the next teaching material would be based (i.e., formative use only).

### **Before**

*The teacher should:*

- Discuss with learners the purpose of the performance assessment.
- Discuss with learners the rules of engagement which includes the scoring criteria.
- Put learners into smaller groups (e.g., groups of 2-5).
- Communicate the performance task to learners (e.g., assemble an electronic circuit on a solderless breadboard using a schematic diagram).
- Discuss with learners the resources available for the execution of the performance task.
- Discuss with learners the actual dates for the submission of the performance product.

*The learner should:*

- Be provided with the relevant tools, cables, solderless breadboard ready for the exercise.

### ***During***

*The teacher should:*

- Provide guidance for the completion of the performance task.

*The learner should:*

- Engage in initial discussion on a task to be performed as a group.
- Be provided available resources such as cables, lead, solderless breadboard and flashlight are used to assemble an electronic circuit.
- Produce a report for the work.

### ***After***

*The learner should:*

- Self-assess their work to identify areas that need improvement.
- Peer-assess the performance of the product and offer constructive criticism.

*The teacher should:*

- Provide his/her overall evaluation of the performance product.
- Inform learners how the evaluation data would be used.

## **Examples of Learning Outcomes requiring the use of project-based assessment Manufacturing Engineering**

Learning Outcome: Demonstrate ways in which the manufacturing industry affects the environment

Project 1: Sustainable Manufacturing and Green Innovations for Environmental Protection

Project Description: Explore the environmental impact of the manufacturing industries in a selected town and develop innovative solutions for sustainable manufacturing practices. Investigate various aspects like pollution, waste generation, resource consumption, and carbon emissions associated with different manufacturing processes. Research and analyze the current initiatives and technologies implemented by manufacturers to mitigate these environmental impacts.

### **Project Tasks**

1. Research and compile information on the environmental impact of the manufacturing industry, focusing on the different stages of production.
2. Analyze case studies of manufacturing companies that have successfully implemented sustainable practices to reduce their environmental footprint.
3. Conduct a survey or interview local manufacturers to gather information about their current sustainability initiatives.

4. Brainstorm and propose innovative ideas or technological advancements that can minimize the negative impacts of manufacturing on the environment.
5. Design a multimedia presentation or a poster to raise awareness about sustainable manufacturing practices within the school community.

**Project Outcome:** The project outcome will be a report/presentation highlighting the students' understanding of the environmental impact of the manufacturing industry and their proposed solutions for sustainable manufacturing practices. Students will also present their findings and recommendations to their peers, teachers, and local manufacturers to create awareness and encourage the adoption of sustainable manufacturing strategies.

### C.3 Exemplar for Business, Project-Based Assessment

**Learning Outcome:** Demonstrate ability to determine the cost of different types of goods, services, and activities in a named community and prepare a budget plan for them.

**Project Title:** Budgeting and Cost Analysis in Our Community

**Description:** Explore the concept of budgeting and develop an understanding of the costs associated with various goods, services, and activities in your community. Research and determine the cost of essential items, services, and popular recreational activities within their community and develop and present a budget.

#### Project Tasks

1. **Identifying Key Components:** Begin by explaining the concept of budgeting and its importance in managing personal finances. Encourage students to identify the different components of a budget, such as income, expenses, savings, and discretionary spending.
2. **Research Local Market Prices:** Instruct students to research and collect data on the current prices of essential goods in their community. This can include groceries, household items, clothing, transportation, and other necessary purchases. Students should compare prices from different stores to identify any variations.
3. **Cost of Services:** Students should investigate the cost of essential services, such as electricity, water, internet, and phone services. They should also consider other services they may use, such as gym memberships, public transportation, and leisure activities like movie tickets or dining out.
4. **Recreational Activities and Cost Analysis:** Students will explore popular recreational activities in their community, such as visiting amusement parks, and museums, or attending sports events. They should research the costs associated with these activities, including ticket prices, food, transportation, and any additional expenses.
5. **Budgeting Plan:** Using the information gathered, students will develop a sample budgeting plan for a month. They should allocate funds for various expenses, prioritise savings and discretionary spending, and ensure the budget is realistic and balanced.

6. **Presentation and Reflection:** Students will present and explain their budgeting plans to the class. This allows for group discussion and the sharing of ideas on effective budgeting strategies. Students should reflect on the challenges they faced in determining accurate costs and consider potential strategies to save money or reduce expenses.

### Project Outcome

The project outcome will be a budgeting plan and presentation that demonstrates the student's knowledge and ability to determine the cost of different types of goods, services, and activities in their local community. Additionally, students will gain a practical understanding of budgeting and financial management principles that can be applied to their personal lives.

### Rubrics For Project-Based Assessment

Criteria	Advanced (3mk)	Intermediate (2mk)	Developing (1mk)
Reality	Highly realistic product to address the problem	Moderately realistic product to address the problem stated	The product is not appropriate for the stated problem
Relevance of Project	Highly relevant of product to the learning outcome	Moderately relevant product to the learning outcome	Less relevant of product to the learning outcome
ECO friendliness of the product	Highly environmental friendliness of the product	Moderately environmental friendliness of the product	Less environmental friendliness of the product
Adherence to STEM	High adherence to integrated STEM Concepts	Moderate adherence to integrated STEM Concepts	Less adherence to integrated STEM Concepts
Planning and Design	Has a well- developed plan and design	Has a plan and design but is not well-developed	Has a plan and design but is poorly developed
Processes and procedures	Followed strictly developed plan and design	Followed the developed plan and design	Poorly followed developed plan and procedures
Teamwork and Active Participation	Strong teamwork and active participation by all members of the group	Teamwork and active participation by a few group members	Poor teamwork and active participation
Procedural Record Keeping	Provides evidence of procedural records	Provides evidence of procedural records but not sufficient	Provides little or no evidence of



Criteria	Advanced (3mk)	Intermediate (2mk)	Developing (1mk)
procedural records Innovativeness	Product/ solution highly novel and innovative	Product/ Solution novel but less innovative	The product/ solution is not novel and lacks clarity
Creativity	Exhibit high-level imaginative and critical thinking skills	Exhibit imaginative and critical thinking skills	Exhibit less imaginative and critical thinking skills

#### C.4 Exemplar for using Questioning as an Assessment Strategy

*Subject:* Home Economics

*Strand:* Food and Nutrition

*Sub-strand:* Food for healthy living

*Content Standard:* Analyze factors that influence food habits/lifestyles

*Learning Outcome:* Use the knowledge in food and nutrition to select and use food appropriately for healthy living

Using questioning as an assessment strategy

Suggested Questioning strategies to be used based on the types and DoK levels:

*Level 1: Recall and Reproduction Open-ended Questions:*

1. Describe your typical daily food choices.
2. What kind of foods do you usually prefer for breakfast, lunch, and dinner?

*Closed-ended Questions:*

1. Do you eat fruit and vegetables daily?
2. Is fast food a regular part of your diet?

*Level 2: Basic Application of Concepts and Skills Funnel Questions:*

- Explain any specific eatery you enjoy eating at. (Broad)
- What dishes do you like from that cuisine? (Narrow)

*Probing:*

1. How do culture/religion influence and geographical location affect your food choices?
2. How does your work schedule impact what you eat during the day?

*Level 3: Strategic Thinking and Complex Reasoning Leading Questions:*

1. Considering your interest in health, do you tend to choose more nutritious options?
2. Given your busy schedule, do you find it challenging to prepare meals at home?

*Hypothetical Questions:*

1. If you had access to fresh, locally sourced produce, how do you think it would influence your food choices?
2. How might your food habits change if you had more time for meal preparation?

*Level 4: Extended Thinking and Complex Reasoning Analytical Questions:*

- How do economic factors like income level influence the quality of food you consume?
- Describe the psychological factors that drive your food choices.

*Speculative Questions:*

1. How might your food habits be affected if you were to live in a different culture?
2. How could technological advancements in food production shape your future dietary preferences?

*Level 5: Critical Thinking and Metacognition Evaluative Questions:*

1. Reflecting on your current habits, do you believe they contribute positively to your overall health and well-being?
2. How might your food choices align with your long-term life goals and values?

*Reflective Questions:*

1. Considering your upbringing, do you see any patterns in your food choices that stem from your family's traditions?
2. Explain how your food habits might evolve in the next decade, and why.

**C.5 Exemplar for using Practical Assessment as an Assessment Strategy**

The example is extracted from the core science curriculum. Strand: Relationships with the Environment, sub-strand: Technology in our Local Industries

*The purposes of this Practical assessment are:*

- To enable learners to demonstrate an understanding of the process of local soap-making.
- To design methods of producing soaps for different purposes for income generation.

*The learning outcome for this Practical Assessment is:*

- Produce local soap in the community.

*The instructions for collecting, selecting, reflecting, reviewing, and submitting this Practical Assessment based on the learning outcomes are to:*

- Visit a place in your community where local soap(s) is/are produced to observe and document the stages of production and the diversity in the soaps
- Conduct experiments to prepare a local soap

*In using, conclusion and submission of Test of Practical report:*

1. Learners should vary the materials (reactants) to see the outcomes

2. Learners will then reflect and make presentations
3. The teacher and learner decide on what will be included in this Practical Assessment.

Learners should include the following: work in convenient groups, to use the internet, books, and journals to brainstorm and write a report on the science processes (saponification, etc.) in the stages of production of the local soap.

4. The teacher and learners discuss the standards of performance/scoring criteria (e.g., a rubric) to assess the progress of learning and provide constructive feedback.

## C.6 Exemplar for using Computational Tasks as an Assessment Strategy

*Subject:* Additional Mathematics

*Strand:* Geometric reasoning and measurement Sub-Strand: Spatial reasoning

*Content Standard:* Demonstrate knowledge and understanding in spatial sense in relation to lines and angles between intersecting lines.

*Before:*

1. Learning Outcome: Solve problems on acute angles between two intersecting lines
2. Develop a set of computational tasks that align with the defined learning outcomes and establish clear assessment criteria or grading rubrics. These tasks should involve finding and calculating acute angles between intersecting lines.

*For example:*

- a) Given two lines intersecting at point P, find the measure of angle AOP.
  - b) Determine the measure of angle BOQ when two lines intersect at point Q.
  - c) Find the acute angle between two lines with equations  $y = 2x + 3$  and  $y = -3x + 5$ .
3. The purpose of this assessment is to assess learners' proficiency in understanding and solving problems related to acute angles between intersecting lines. By completing this assessment, learners will have the opportunity to demonstrate their knowledge and problem-solving skills in this area.

*During:*

1. Distribute the computational task to the learners on the assessment day. Ensure that the assessment environment is fair and cheat-free. (NB: differentiate the tasks to meet learners' proficiency and competencies)
2. Be available during the assessment to address any questions or concerns learners might have. Clarify any doubts about the task requirements. Manage the time effectively to ensure that learners can complete the assessment within the designated timeframe (be conscious of learners' socio-emotional feelings and special needs).

*After:*

1. Collect the completed computational tasks from the learners. Assess their work using the predetermined criteria or grading rubrics. Assign scores to each learner based on their performance and provide feedback.

2. Offer meaningful feedback to learners on their performance. Share the assessment results with them, highlighting their strengths and areas for improvement. Encourage them to reflect on their performance and seek growth opportunities. Finally, review the assessment's effectiveness in evaluating the learning outcome and make any necessary adjustments for future assessments.

### **C.7 Exemplar for using Debate as an Assessment Strategy**

*Subject:* Geography

*Strand:* Human and Environment

*Sub-strand:* Economic Activities

*Learning outcome:* Examine the methods, importance and problems of agriculture, lumbering and mining in Ghana.

*Content standard:* Demonstrate an understanding of the various primary economic activities in Ghana and beyond

*Learning indicator:* Discuss the characteristics of subsistence and commercial agriculture and their importance and challenges in Ghana

1. Based on the prescribed pedagogical approach in the curriculum the appropriate topic/ motion for the debate is "Should Ghana prioritize subsistence agriculture over commercial agriculture to address food security and economic development challenges"
2. In using debate as an assessment strategy in this context, teachers must embrace diversity by ensuring learners listen to and tolerate the opinions of their peers on the motion. (Consideration must be given to learners with SEN by encouraging them to take a stand on the motion. Again, additional time can be allotted to learners with communication needs.
  - Encourage participation of both boys and girls
  - Provide positive feedback on the motion
  - Areas for Improvement after the presentation
  - The teacher and learners discuss the standards of performance/scoring criteria

### **C.8 Exemplar for using Displays and Exhibitions as an Assessment Strategy**

*Subject:* Home Economics

*Strand 2:* Clothing and Textile

*Sub-strand:* Clothing Production Technology

*Content Standard:* Demonstrate knowledge, understanding of clothing production and entrepreneurial skills necessary for gainful employment.

*Learning Outcome:* Plan and mount exhibition for finished Clothing and Textiles products.

*Purpose:* Teacher uses displays and exhibitions to assess learners' ability to plan and mount an exhibition.

*Concept:* "Sustainable Ghanaian Fashion"

1. Selected Theme: "Fashion through the ages"
2. Resources and materials: final sewn dresses from the 1990's (old school styles) through the latest or modern styles.
3. Planned layout and design for arrangement of products or exhibits are:
  - U-shaped room where all products will be displayed, and visitors/ learners/assessors will move freely at the middle from left-right or vise- versa.
  - Venue/space for the exhibition/display to be well ventilated, spacious, airy, and accessible.
  - Duration: 2-3 hours
  - All costumes will be arranged separate stands i.e. male, female and children
4. Assessment criteria and expectations developed for learners and communicated to them i.e. the purpose, outcomes, and expectations of the display or exhibition.
5. Roles and responsibilities assigned to learners either individually and/or group effectively to promote teamwork and ensures that each aspect of the exhibition is assigned.

For example, a GATE learner may be given a complex role/responsibility i.e. talk about product/ideas, while the untalented or slow learner may be assigned with a less complex role/responsibility i.e. hanging a write-up/description of their products.

6. Display exhibits to be mounted at their appropriate places/stands with suitable lighting.
7. Each learner or groups presents their outfit, explaining the sustainable elements and design choices.
8. Encourage peers to provide constructive feedback considering creativity and appropriateness to the year or era.
9. Teacher uses the developed assessment criteria to assess:

Criteria		Met	Not Met
1.	Are the exhibited garments and accessories historically accurate in terms of style, materials, and construction for their respective time periods?		
2.	Does exhibits/products of learner's have a clear theme or narrative that is linked to the main theme?		
3.	How are the garments displayed? Are they properly lit, well- maintained and presented in a way that allows visitors to appreciate their details and skills/ craftsmanship?		

The teacher reflects on learners' assessed works/products and engages the class in a discussion on the effectiveness of the displays and exhibits in line with the achievement of the learning outcomes.

**NB:** Teacher can consider hosting a public exhibition to emphasize the relevance and impact of learners' work.

Fashion from the 1990s



Fashion from the 2000s



## C.9 Examples for using Homework/Assignment as an Assessment Strategy

*Subject:* Geography

*Strand:* Human and Environment

*Sub-strand:* Physical Settings and People

*Learning indicator:* Discuss the major relief and drainage features of Ghana and their importance.

*Learning outcome:* Examine the physical environment of Ghana (relief, drainage, climate, vegetation and soils) and their socio-economic importance.

*Assignment:* Model the outline map of Ghana and on it indicate:

1. The major relief features and vegetation zones
2. Five major towns located in such areas.

## C.10 Exemplar for using Demonstration as an Assessment Strategy

The example is extracted from the home economics curriculum.

*Strand:* Food and Nutrition

*Sub-strand:* Food for Healthy Living

- The expectation of this assessment is for learners to demonstrate knowledge and understanding of food spoilage and skills in food storage.
- Instructions on how to store food commodities.
- Select a suitable storage area based on the specific commodity you want to store.
- Ensure that the storage area is clean, dry and free from any pests or contaminants.
- Categorize the commodities based on their type, quality, and expiration date.
- Use containers that are suitable for the specific commodity.
- Clearly label each container with the commodity name, lot number, and any other relevant information.
- Regularly inspect the storage area for signs of pests and take necessary measures to prevent infestation.
- Implement a first-in, first-out (FIFO) system to ensure that older stock is used or sold before newer stock.
- Conduct routine inspections of the storage area and commodities to identify any signs of damage, spoilage, or deterioration.
- Ensure that the storage area complies with all safety regulations and rules.
- Learners are allowed to rehearse the instruction above.
- Materials for storage are made available such as airtight containers, sacks, bottles and food commodities such as beans, rice, oil, fish, etc.
- Concerns of learners after the rehearsals are addressed e.g., need for ovens, fridges and some chemicals.
- The task is distributed to learners in differentiated forms considering Special Education Needs.
- Learners are observed as they demonstrate.
- Learners are guided throughout the period of demonstration
- Learners are monitored and timing is paced well.
- Learners' strengths and weaknesses are noted
- Areas of improvement are highlighted.



## C.11 Exemplar for using Discussion as an Assessment Strategy

*Subject:* Biology

*Strand:* Exploring Biology in Society

*Sub-Strand:* Biology as the Science of Life

*Learning Outcome:* Explain the importance of biology and its branches and relate this to everyday life.

*Content Standard:* Demonstrate knowledge and understanding of Biology, the various branches and fields of study, and their benefits in everyday life. *Learning Indicator:* Observe and discuss the importance of biology, its various branches and their applications in everyday life.

1. The learning outcome for this assessment is to explain the importance of biology and its branches and relate this to everyday life.
2. Based on the prescribed pedagogical approach in the curriculum the appropriate discussion format for this assessment is collaborative problem- solving discussion.
3. Prompt



*Using the pictures above, in your discussion, identify the branches, importance and the life application of biology*

4. In your discussion, ensure the following:
  - Equal participation
  - Pay attention
  - Respect for individual opinions
  - Take note of salient points
  - Sample assessment criteria (consider the DoK)



Statement	Present	Absent
Does the learner stay on topic?		
Does the learner show understanding by using subject matter vocabulary appropriately?		
Does the learner use concepts and vocabulary learned in the classroom to add weight to his/her opinions and ideas?		
Does the learner contribute his/her ideas and build upon the ideas of others?		
Is the learner respectful to others concerning differences in opinion?		
Does the learner provide constructive criticism to others regarding their thoughts, comments, or work?		

5. The teacher should provide intermittent feedback to learners during and after the discussion.
6. After the discussion, learners summarise what they have learnt in the discussion.

### C.12 Exemplar for using Simulation Assessment Strategy

*Steps to be followed by teachers and learners in simulating osmosis as an assessment strategy*

**NB:** Teachers should pay attention to learners with hearing and visual impairment.

*Strand:* Processes for Living

*Sub-strand:* Essentials for Survival

*Content standard:* Demonstrate understanding, appreciation, and model the movement of substances in biotic and abiotic media.

*Learning outcome:* Appreciate the movement of substances in biotic and abiotic media.

*Learning Indicator:* Design, model and explain the process of osmosis and indicate its application to everyday life.

*Purpose:* To check if learners understand osmosis (how water moves through special barriers) and what factors affect it.

*Teacher's Instructions:* Tell the learner to:

- Pick a simulation that helps learn about osmosis.
- Let learners change things like temperature, pressure, and more.
- Show learners the simulation; explain osmosis, and what they should learn.
- Let learners familiarize themselves with the simulation to understand it better.

- Explain osmosis a bit more and have learners use the simulation to try different concepts.

*Reflect and Improve:* After using the simulation, discuss with the learner about what they learned and how to make it applicable to other fields.

*Assessment criteria:* Engage the learner in the scoring of the task. The feedback should be constructive and enable the learner to improve their knowledge and skills in a similar task.

### **C.13 Exemplar for using Checklist Assessment Strategy**

*Steps to be followed by teachers and learners in using a checklist as an assessment strategy*

*Strand:* Systems of life

*Sub-Strand:* Plant systems

*Content standard:* Demonstrate knowledge and understanding of transport and nutrition in flowering plants.

*Learning Outcome:* Explain the processes of transportation and photosynthesis in flowering plants.

*Learning Indicator:* Explain how substances are transported in flowering plants and state the factors affecting them:

*Purpose:* To assess whether learners can accurately remember and explain key concepts, processes, and elements related to photosynthesis.

*The teacher gives instructions for selecting, conducting, reflecting, and reviewing checklist assessments based on the learning outcomes which are to:*

1. Define Criteria: Create a checklist with specific criteria for assessing photosynthesis knowledge.
2. Explain Objective: Tell learners the assessment goal: understanding photosynthesis.
3. Provide Resources: Offer learning materials like books, videos, or articles.
4. Assign Tasks: Give learners projects to show their photosynthesis knowledge.
5. Assess with Checklist: Use the checklist as learners' complete tasks, marking off criteria.
6. Teacher allows learners to do self-assessments, provide feedback, and have class discussions to improve learning outcomes. Draw follow-up activities like the use of quizzes or group discussions to ensure knowledge retention.
7. Continuous Improvement: Adjust teaching based on assessment results, focusing on areas where learners struggled.
8. Assessment Criteria: The teacher and learners discuss the standards of performance/ scoring criteria (e.g., a rubric) to assess the progress of learning and provide constructive feedback.

## C.14 Exemplar for using Critiquing as an Assessment Strategy

*Subject:* Art and Design Foundation

*Strand:* THE CREATIVE JOURNEY (From Caves to 21st Century) Sub-Strand: Art Across Time

*Learning Outcome:* Identify and analyse modern Ghanaian artworks from the 1920s to 1985 in terms of materials, methods, and uses.

*Content Standard:* Demonstrate knowledge and understanding of modern Ghanaian Artworks from the 1920s to 1985 in terms of materials, processes, and uses as a basis for making artworks that reflect a wide range of times.

*Learning Indicator:* Evaluate the contributions of Modern Ghanaian Artists and their artworks to the history of Ghana:

*Based on the prescribed pedagogical approach in the curriculum the appropriate critiquing format for this assessment is Experiential Learning/ Structuring Talk for Learning*

The purpose of using critiquing in this context is to:

- Investigate how indigenous Ghanaian art and design was used as the basis for concept development for Modern Ghanaian artists/designers.
- Develop a pictorial spidergram for discussion and peer review.

*In using critiquing in this context, teachers must ensure the following:*

1. Embrace diversity by ensuring learners listen to the opinions of their peers on how indigenous Ghanaian art and design have been used. (Consider the socio-cultural background of learners and learners with Special Education Needs)
2. Respect for individual opinions especially on the pictorial spidergram (teachers must consider respect, tolerance, integrity of learners)
3. Review the Work on the pictorial spider gram.
4. Positive Feedback on the Pictorial Spider gram
5. Areas for Improvement after the presentation
6. Provide Evidence of suggestions made.

*Overall Impact*

- The teacher and learners discuss the standards of performance/scoring criteria (e.g., a rubric) to assess the progress of learning and provide constructive feedback.

## C.15 Exemplar for using Research Assessment Strategy

*Subject:* Science

*Strand:* Relationships with the environment

*Sub-Strand:* Technology in our local industries

**Learning Outcome:** Conduct a project on the production of an indigenous food and produce a report.

**Content Standards:** Explore the production of indigenous food (gari, akyeke, yakeyake, kenkey [Ga or Fante], abolloo, tubaani, dawadawa, etc).

**Learning Indicators:** Investigate the production of an indigenous food to identify the scientific processes in the stages of production.

**Purpose:** Teacher uses research to investigate the production of an indigenous food to identify the scientific processes in the stages of production.

**Feedback and Review:**

1. Learners to reflect, self-and peer-assess and provide constructive feedback.
2. Teacher to provide constructive feedback highlighting strengths and areas for improvement.

**NB:** Teacher must ensure to address any misconceptions about the production of an indigenous food that may have emerged during the research work presentation.

3. Learners use the feedback to improve on their research work.

## C.16 Exemplar for using Class Exercise as Assessment Strategy

*Strand:* Systems of life

*Sub-Strand:* Plant systems

*Content Standard:* Demonstrate knowledge and understanding of transport and nutrition in flowering plants.

*Learning Outcome:* Explain the processes of transportation and photosynthesis in flowering plants.

*Learning Indicator:* Explain how substances are transported in flowering plants and state the factors affecting them.

*Purpose:* Teacher uses class exercises to assess learners' understanding of photosynthesis

	<b>Multiple activities to be used as class exercise in a lesson</b>	<b>Assessment Criteria to be used per exercise</b>
1.	Draw and label the plant cell.	Accuracy in labelling
2.	Fill in the blank spaces in the following sentences.	Accuracy in filling in blanks
3.	Explain the term photosynthesis.	Clarity and correctness of explanations
4.	Choose the correct answer from the alternatives given.	Accuracy in responses to quiz or multiple-choice exercise
5.	Conduct an experiment on photosynthesis, observe and record findings for reporting.	Competence in conducting and reporting

*Feedback and Review:*

- Learners to reflect, self-and peer-assess their exercises and provide constructive feedback.
- Teacher to provide constructive feedback highlighting strengths and areas for improvement. NB: Teacher must ensure to address any misconceptions about photosynthesis that may have emerged during the class exercise.
- Learners use the feedback to improve on their work/exercises.

## C.17 Exemplars for using MCQS as an Assessment Strategy

*Subject:* Home Economics

*Strand:* Food and Nutrition

*Sub-strand:* Food for healthy living

*Learning Outcome:* Use knowledge of food and nutrition to select and use food appropriately for healthy living.

### Table of test Specification

Content/topics	Depth of Knowledge (DoK)				Total
	Level 1	Level 2	Level 3	Level 4	
Healthy and unhealthy food	3	0	1	1	5
Essential food grouping for healthy living	2	2	1	1	5
Total	5	2	2	1	10

### Examples of MCQS

#### Level 1

- Which one of the following is not a common method of cooking traditional foods?
  - Baking
  - Boiling
  - Grilling
  - Roasting

#### Level 2

A pregnant woman decides to take in iron-rich foods every day as part of her diet plan. What malnutritional condition is she likely to prevent?

- Anemia
- Beriberi
- Kwashiorkor
- Pellagra

#### Level 3

A 19-year-old woman rushed to the clinic with concerns about her 3-year-old son. For the past 2 months, the child has not been feeding properly. The mother notes that her son has had repeated bouts of diarrhoea, a swollen abdomen, a round face, dry hair, and skin lesions. Use this information to answer the question that follows:

What malnutritional condition is the child experiencing?

- Anemia

2. Beriberi
3. Kwashiorkor
4. Pellagra

*Level 4*

George is a 42-year-old man with severe chronic obstructive pulmonary disease. He has been referred to the Respiratory Clinic for a nutrition assessment before the lung transplant. To receive a lung transplant, George must reach a goal weight of 67 kg. As a dietitian which of the following information is essential in achieving your goal?

- I. Diet history
  - II. weight history
  - III. work history
1. I only
  2. I and III
  3. I and II only
  4. I, II, and III

### **C.18 Exemplar for using E-Assessment Portfolio**

*Subject:* ICT

*Strand:* 1. ICTs in the Society

*Sub-strand:* Connecting and Communicating Online

*Learning Outcomes:* Discuss and use internet applications

*Content Standard:* Demonstrate knowledge and understanding on the use of the internet

*Learning Indicator:* Describe the evolution of the internet and identify internet service providers and their functions.

Online Team Projects

*Task:* Learners complete a design and production investigative task to demonstrate their understanding and competencies in ICT through online team project on evolution of the internet.

*Description of Task:* Learner's search and select information online, Process and develop of digital information, presentation and dissemination of digital information. Learners use Basic notions of digital technology, Work planning in a virtual environment and Management of a digital project.

*Purpose Assessment:* the aim of e-assessment is to reinforce and boost the learners. Learning process to help them to acquire the competencies of the ICT competency subject.

## C.19 Exemplar for using Virtual Assessment Strategy.

*Subject:* Biology

*Stand:* Exploring biology as the science of life

*Sub-strand:* Biology as the science of life

*Learning Outcome:* Apply knowledge of body symmetry, orientation and sections of various organisms and make labelled drawings of specimens.

*Content Standard:* Demonstrate knowledge and understanding of biology, the various branches and fields of study and their benefits in everyday life.

*Learning Indicator:* Observe and identify the various orientations and symmetries of different organisms.

### **Before**

#### *Preparation and Planning*

1. Example of VR technology that can be used based on the learning indicator: the teacher should thoroughly acquaint themselves with any of the following: 3D Virtual Microscope, Virtual Dissection Tools and 360-Degree VR Videos and Images including the type of headset and controllers.
2. Select Suitable VR Content: the teacher chooses VR content that aligns with the curriculum and learning outcome. For example: VR content that simulates dissections of organisms like frogs, earthworms or other specimens that can provide learners with a detailed view of their internal structures and orientations. Also, the teacher sets the assessment criteria or rubrics to be used.

*(NB: taking into consideration age-appropriate, relevant to the subject matter and learners with special educational needs).*

*The Purpose of Assessment:* the purpose of this assessment is to gain a profound understanding of the orientations and symmetries of diverse organisms. This immersive experience will aid learners in recognising the structural symmetry and adaptations of these organisms to their respective habitats.

### **During**

#### *Implementation and Facilitation*

1. During the VR Session: teachers should guide learners on how to interact with the VR environment and outline the specific tasks or challenges learners are expected to complete (NB: teachers should be conscious of adaptive or differentiated tasks to suit learners' needs).
2. Supervision and assistance: Teachers should supervise learners while learners use the VR equipment and ensure their safety and proper use. Teachers should take into consideration learners with special educational needs and SEL issues.



3. Facilitate VR Assessment: Teachers should assist learners to complete the task or respond to questions within the VR environment to demonstrate learners' understanding, skills and competencies.

### **After**

#### *Assessment and Post-VR Activities*

1. Data Collection: Teachers should collect data on learners' performance. This may include recording learners' actions or taking notes on learners' responses.
2. Assessment and grading: Teachers should evaluate the performance based on the established assessment criteria or rubrics.
3. Feedback and discussion: Teachers should engage learners to discuss their experiences and encourage them to reflect on what they have learned and how the VR content contributed to their understanding.

## **C.20 Exemplar for using Peer Assessment Strategy**

*Subject:* Home Economics

*Strand:* Clothing and Textiles

*Sub-Strand:* Psychosocial Aspect of Clothing

*Learning outcomes:* Select clothing suitable for various occasions and apply different techniques in caring for and maintaining clothing.

*Content standards:* demonstrate knowledge and understanding of the concept of clothing, reasons for wearing clothes, care, and maintenance.

*Learning indicators:* classify clothes under various categories

- Based on the learning indicator teacher gives an assessment for learners to suggest suitable clothes for the first lady of Ghana.

E.g.: Question: As a stylist to the First Lady of Ghana, select suitable clothing for her towards the celebration of the 68th independence of Ghana.

1. Independence Parade
2. Children's Home funfair
3. Gala and fundraising dinner

The teacher provides the assessment criteria. E.g.: Are the clothes appropriate for the events based on the following:

1. Time of day
2. Social status of the first lady
3. Main event
4. The teacher put learners in groups
5. The learners work on the assignment

6. The learners assess the work based on the assessment criteria
7. The teacher gives a constructive feed back
8. The learners revise their work based on feedback received

### **C.21 Exemplar for using Essay Assessment Strategy**

*Subject:* Geography

*Strand:* Navigating our environment

*Sub-strand:* Maps, their elements and their analyses

*Learning Outcome:* Based on your knowledge of maps, examine the different types of maps, their importance and the map scales.

*Content Standard:* Demonstrate understanding of maps, their importance, and the map scales.

*Learning indicator:* Discuss types of maps and their importance.

Based on the prescribed pedagogical approach in the curriculum Essay can be used as an assessment strategy to gauge learners' knowledge on the intended learning outcome

*Task:* Discuss with relevant examples five ways in which maps can contribute to socio-economic development of Ghana. (restricted essay type)

*Task:* Discuss with relevant examples some ways in which maps can contribute to socio-economic development of Ghana. (open ended essay type)

#### **In using Essay as an assessment strategy in this context, the teacher should:**

1. Embrace diversity by considering the socio-cultural background of learners.
2. Give learners with SEN an extended period to submit their essay.
3. Provide constructive feedback (orally or written) on their performance on the essay.

### **C.22 Exemplar for using Poster Assessment Strategy**

*Subject:* Art and Design Foundation

*Strand:* The Creative Journey (From Caves to 21st Century)

*Content Standard:* Demonstrate understanding of indigenous Ghanaian Art periods and artworks in terms of materials, processes, uses, and socio-cultural relevance from pre-colonial to the 21st century.

*Learning outcome:* Analyse indigenous Ghanaian artworks in terms of materials and methods, and their socio-cultural contexts for creative expression in art and design.

*Learning Indicator:* Record and Analyse the major indigenous Ghanaian Art periods and artworks in terms of materials, methods of fabrication, uses, and socio-cultural relevance.

*Purpose:* The purpose is to assess learners' ability to research and analyse indigenous Ghanaian artworks in terms of materials and methods, and their socio-cultural contexts for creative expression in art and design and then produce poster assessment portfolio for evaluation

*Description*

Tasks for learners:

1. Learners identify various Indigenous Ghanaian art periods; precolonial i.e. the initial period in the making of the indigenous Ghanaian Art, colonial and post-colonial in terms of art and design works such as carvings, pottery, metalworks, jewelry, woven objects, textiles, leatherworks, body painting and marks etc. and document them by scanning, photographing or forming an album
2. Research to identify indigenous Ghanaian art by going into the communities (galleries, art shops, artmaking statuaries, museums) to look for the artworks
3. Look for images from manual and digital sources such as books, journals, magazines, slides, videos, photographs, internet etc.
4. Generate a manual and digital annotated album by taking photographs, clipping images and photographs from manual sources as well as downloading and storing pictures and videos from the internet
5. Expected to collect real objects where it is permitted by taking photographs.
6. Make notes and drawings about the various artworks.
7. The term "precolonial" refers to the period before the arrival of colonial authority or influence by foreign powers in a certain part of the world to dominate and influence the indigenous culture of the people.
8. Instructions: Learners are assisted and guided to research into problem identified, which involve understanding same issue, problem or challenge in the community and developing the appropriate remedy to the situation
9. Assessment Criteria: The teacher and learners discuss the standards of performance/ scoring criteria (e.g., a rubric) to assess the progress of learning and provide constructive feedback.

### **C.23 Exemplar for using Dramatic Monologue**

*Subject:* English language

*Strand:* Literature

*Sub-strand:* Narrative, Drama and Poetry

Learning outcome: Employ monologues and dialogues in texts

*Content standard:* Demonstrate knowledge and understanding of how language of literary genres facilitates understanding of a text.

Learning indicator: Create monologues and dialogues in narratives and plays to make meaning

*Purpose:*

1. Examine learners' ability to identify monologues and dialogues in narratives and plays and discuss how they help to convey meaning.
2. To generate classroom data on which the preparation of the next teaching material would be based (i.e., formative use only).

**Before***Teacher should:*

- Give learners initial knowledge (orientation) about dramatic monologue as assessment strategy.
- Assign a written play to individual learners.
- Discuss with learners the rules of engagement which includes the scoring criteria.
- Discuss with learners the available resources to be used.
- Discuss ethical issues surrounding monologue creation with learners (e.g., propaganda, character assassination, etc.)
- Discuss with learners the actual dates for the presentation of the monologues.

*Learners should:*

- Reproduce a written report about the character in the assigned "written play".
- Engage in an initial discussion about the genre of their assigned play with teachers and peers.

**During***Teacher should:*

- Provide guidance during the monologue delivery.
- Create an artificial stage that generally fits the plays assigned to learners.

*Learner should:*

- Gives an oral presentation about the character in their assigned written play.
- Emphasizes what their monologue is addressing (e.g., the character of Ananse signifying corrupt thinking and craftiness, in Ananse and the wisdom pot story)

**After***Learners should:*

- Peer-assess what has been presented by their colleague and offer constructive criticism.
- Offer suggestions on what needs to be done to improve the work which was presented.

*Teacher should:*

- Should provide his/her overall evaluation outcome on the work which has been presented.
- Should inform learners how the evaluation data would be used.

## C.24 Exemplar for using Dramatisation as Assessment Strategy

*Subject:* English language Strand: Literature

*Sub-strand:* Narrative, Drama and Poetry

*Learning outcome:* Traces the sequence of events in texts

*Content standard:* Demonstrate knowledge and understanding of how language of literary genres facilitates understanding of a text.

*Learning indicator:* Develop the sequence of events across texts and how they contribute to meaning.

*Purpose:*

- Examine learners' ability to trace the sequence of events in a text and discuss how they help to convey meaning.
- To generate classroom data on which the preparation of the next teaching material would be based (i.e., formative use only).

*Before*

*Teacher should:*

- Discuss with learners the purpose of the dramatisation assessment.
- Discuss with learners the rules of engagement which includes the scoring criteria.
- Put learners into smaller groups (e.g., groups of 2-5).
- Discuss with learners the available resources to be used.
- Discuss with learners the actual dates for the performing of each group's drama.
- Make the drama stage ready for learners to act out their script.

*Learners should:*

- Rehearse the drama that will be performed.
- Engage in an initial discussion about the genre of their assigned play with teachers and peers.
- Make their costume for the play available before the set date for the drama.

***During***

*Teacher should:*

- Create a conducive atmosphere.
- Create an artificial stage that generally fit the plays assigned to learners.
- Monitor the time to be used in performing the drama.

*Learner should:*

- Wear rightful costume for the drama
- Perform the drama on stage for the rest of the class and the teacher to observe.

**After**

*Learners should:*

- Peer-assess what has been presented by their colleague and offer constructive criticism.
- Self-reflect on the drama, that is, considering what went well and areas that require modification.

*Teacher should:*

- Should provide his/her overall evaluation on the performed drama.
- Should inform learners how the evaluation data would be used.

**C.25 Exemplar for using Gamified Assessment Strategy**

*Subject:* Physical Health Education

*Strand:* Physical activity and health

*Sub-strand:* Organised sports participation

*Learning outcome:* Demonstrate maneuvering in performing organized team sports (e.g., football, handball, etc.)

*Content standard:* Demonstrate the ability to apply creative movements in organized sports (e.g., football, handball, etc.)

*Learning indicator:* Identify and discuss the types of maneuvers in sports such as moving into open space, supporting teammates with ball or without the ball, etc. *Purpose:* Gamified assessment will help learners practice maneuvering skills in organized sports as they play games.

**Before**

*Teacher should:*

- Give learners initial knowledge (orientation) about gamified assessment.
- Put learners into groups (e.g., group membership from 2 to 5)
- Discuss with learners the rules of engagement which includes the scoring criteria.
- Discuss with learners the available resources to be used.
- Discusses safety precautions with learners.

*Learners should:*

- Select game(s) of their choice that relate to the task to be performed.
- Should report to teachers their fitness level to be able to carry out the exercise.

**During**

*The teacher should:*

- Provide guidance during the gaming exercises.

*The Learner should:*

- Play their chosen game, in this exemplar, “pass the ball” game was chosen.
- Exercise caution in order not to incur any physical or mental injury.

*After*

- Teacher and learners collaboratively evaluate the outcome of the tasks.
- Individual learners’ feedback is communicated to them.

*The feedback of the assessment would be used for the purpose of identifying strength and areas that require improvement in the maneuvering concepts.*

## **C.26 Exemplar for using Test of Practical Knowledge Assessment Strategy**

*Strand:* Processes for Living

*Sub-Strand:* Essentials for Survival

*Content standard:* Demonstrate knowledge and ability to research how air moves in and out of humans

*Learning outcome:* Recognise and explain that the energy released during respiration is used to drive processes in the human body.

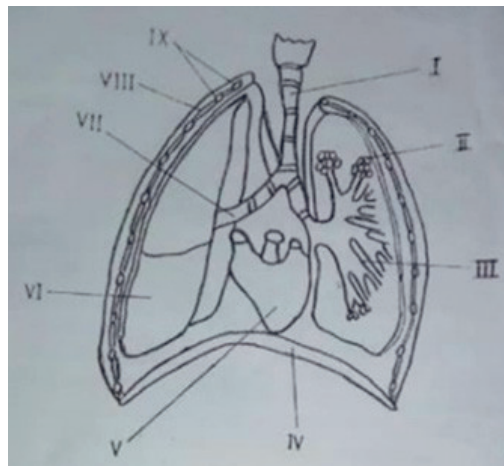
*Learning Indicator:* Explain with a diagram, the concept of the movement of air in humans and its importance.

*Purpose:* The purpose of this Test of Practical Assessment Knowledge is to:

- Enable learners to demonstrate understanding of their application of the practical knowledge on the respiratory system into theory
- Ensure the availability of necessary materials like markers, pencils and models
- Develop a respiratory system diagram and tasks aligned with learning outcomes.
- Review respiratory system details and grasp assessment objectives.
- Clearly explain tasks, guide labelling for learners to apply their knowledge
- Assess accuracy, and offer constructive feedback
- Allow learners to reflect on their work for improvement.
- The teacher and learners discuss the standards of performance/scoring criteria (e.g., a rubric) to assess the progress of learning and provide constructive feedback.

Sample Test of Practical Test Knowledge Assessment





1. Name the parts labelled ii, iii, iv, v, vi
2. State the function of the parts labeled I and v
3. Name the blood vessel that carries blood directly from the part labelled vi
4. List the features of the adaptation of ii for its function

### C.27 Exemplar for using Case Study Assessment Strategy

*Subject:* Social Studies

*Strand:* Identity, Significance and Purpose

*Sub-strand:* Environmental literacy and sustainability

*Learning Outcome:* Demonstrate a positive attitude towards environmental conservation and sustainability.

*Theme:* Environmental conservation



This image depicts a community situated near a river that has a history of being involved in gamamsey activities. The rise of gamamsey operations in the community has posed a



severe threat to the environment and the well-being of local residents as shown in the image above. Observe the image critically and discuss it among your group members.

*Guiding questions to the teacher*

- Explore the consequences of galamsey activities on the local ecosystem and people. (possible areas for discussion: deforestation, water pollution, soil erosion, loss of biodiversity, health hazard etc.)
- How can you communicate this negative effect of galamsey to community members?
- Outline ways or strategies you can employ to encourage the youth to support positive ways of preserving the environment. (afforestation, refraining from illegal mining activities, etc.).

*Subject:* Mathematics

*Strand:* Numbers for everyday life

*Sub-strand:* Proportional reasoning

*Learning Outcome:* Demonstrate a conceptual understanding of proportional reasoning on percentages and real-life problems including simple interest, discounts etc.

*Theme:* Calculating simple interest

*Case1:* A bank loan is structured such that the first Gh¢500 attracts a simple interest of 10% with any additional amount attracting a 5% simple interest. If a customer borrowed Gh¢1,200 from this bank, what will be the total amount this customer will pay?

## **C.28 Exemplar for using Research as Assessment Strategy**

*Subject:* Science

*Strand:* Relationships with the environment

*Sub-Strand:* Technology in our local industries

*Learning Outcome:* Conduct a project on the production of an indigenous food and produce a report.

*Content Standards:* Explore the production of indigenous food (gari, akyeke, yakeyake, kenkey [Ga or Fante], abooloo, tubaani, dawadawa, etc).

*Learning Indicators:* Investigate the production of an indigenous food to identify the scientific processes in the stages of production.

*Purpose:* Teacher uses research to investigate the production of an indigenous food to identify the scientific processes in the stages of production.

*Feedback and Review:*

1. Learners to reflect, self-and-peer-assess and provide constructive feedback.

2. Teacher to provide constructive feedback highlighting strengths and areas for improvement.

**NB:** *Teacher must ensure to address any misconceptions about the production of an indigenous food that may have emerged during the research work presentation.*

3. Learners use the feedback to improve on their research work.

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