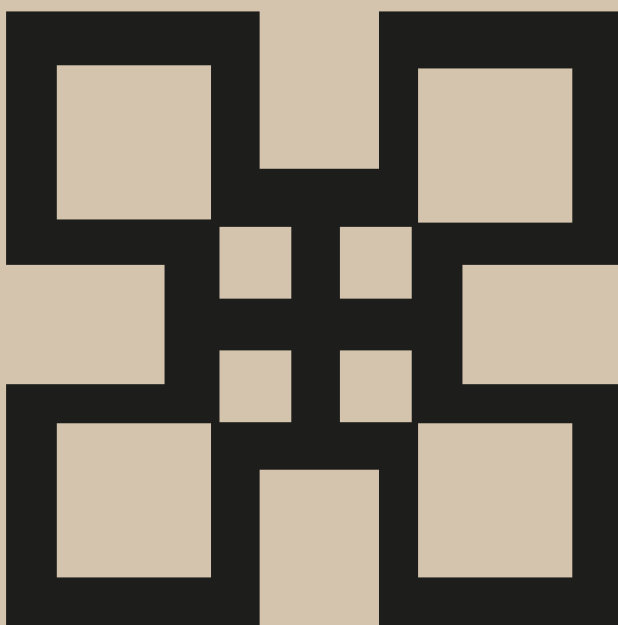


Professional Learning Community Handbook

Geography

Year Two



Ghana Education
Service (GES)



**Professional Learning
Community Handbook**

Geography

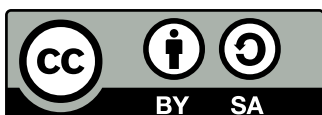
Year Two



REPUBLIC OF GHANA



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Foreword

As Minister for Education, I am delighted to introduce this handbook on Professional Learning Communities (PLCs). The handbook provides practical guidance and resources for teachers to establish and sustain effective PLCs that will drive quality pedagogy and enhance learning outcomes.

Weekly Professional Learning Community (PLC) sessions are the backbone of this Government's commitment to continuous teacher development in every Senior High School. These PLC sessions enable teachers to come together to master the pedagogy, content and assessment needed to successfully implement Ghana's SHS curriculum.

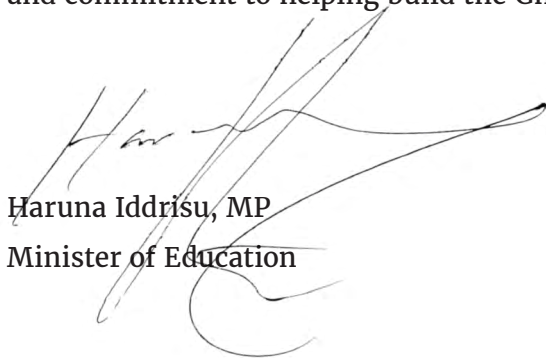
By fostering a culture of collaboration and continuous improvement through PLCs, teachers can enhance their understanding of the new SHS curriculum and effectively facilitate learning in the classroom. This will contribute to our country's resetting agenda by educating a generation of young people with the skills needed to progress to further studies, the world of work and adult life.

PLC sessions are critically important and should be treated with the utmost seriousness. Transforming our education system is a partnership between government, teachers, parents and learners. As teachers gain experience with the new curriculum and assessment regime, PLC sessions can also be tailored to discuss specific issues of concern as a group. It is important that teachers are heard and respected. We have listened to your concerns about PLCs and have factored this feedback into the new Year 2 Subject-Specific PLC Handbooks.

The Handbooks have been designed to be more flexible in structure than those for Year One. Each PLC Handbook is supported by a Subject-Specific App developed by the National Council for Curriculum and Assessment (NaCCA) linked to the revised curriculum. These Apps will help teachers to plan learning activities, assessments and differentiated learning. From our early interactions with teachers to develop and test these Apps we can see the level of excitement about their potential to save teachers time and improve their teaching and learning. These Ghanaian-owned Apps are the first of their kind at this scale anywhere in Africa, helping teachers save time and deliver lessons that truly meet the needs of every learner. I am confident that it will have a significant impact on our education system and ultimately benefit our students, teachers, and communities. All teachers are encouraged to embrace the principles and

practices outlined in this handbook and to work together to build strong, vibrant PLCs that promote enhanced learning outcomes.

I commend the authors and contributors for their tireless efforts in developing this valuable resource, which will enhance the quality of teaching and learning. Thank you to each one of you for your dedication and commitment to helping build the Ghana we want, together.

A handwritten signature in black ink, appearing to read 'Haruna Iddrisu', is written over a light blue rectangular background.

Haruna Iddrisu, MP
Minister of Education

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Links to APPs

Year One App



<https://www.playlab.ai/project/cmdw907a32iheo50ujv3ecgl9>

Year Two App



<https://www.playlab.ai/project/cmdw6fr442g3fndou9ffjfso>

PLC Session 0: Introduction to the Year Two Professional Learning Community Handbook and the Subject Specific App

1.0 Introduction and Purpose of the Handbook (15 minutes)

The purpose of the Year Two Professional Learning Community (PLC) Handbook is to support teachers to effectively deliver the new Senior High School (SHS) curriculum. This Handbook is accompanied by a Subject Specific App tailored to SHS curriculum. The App is designed to assist teachers with lesson planning, delivery and assessment. The Subject Specific App uses information directly from the following materials:

1. Curriculum
2. Teacher Manual
3. Learner Materials
4. Vision and Philosophy of the SHS curriculum
5. 21st century skills and competencies
6. National Teachers' Standards
7. West African Examinations Council Scheme of Assessment and Detailed Syllabus
8. Learning Planning Template
9. Teacher Assessment Manual and Toolkit
10. Socio Emotional Learning
11. National Values
12. Gender Equality and Social Inclusion (GESI), etc.

Learning Outcome (LO): To explore how the Subject Specific App can assist teachers with lesson planning, delivery and assessment (NTS 2b, 2c, 2e, 2f, 3a, 3d, 3e, 3g-3k and 3o).

Learning Indicator (LI) 1: Use the Subject Specific App to explore the Year Two Curriculum Materials (Teacher Manual and Learner Materials)

Learning Indicator (LI) 2: Discuss the advantages and disadvantages of using the Subject Specific App to design lessons and assessment strategies.

2.0 Exploring the Subject Specific App (65 minutes)

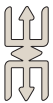
- 2.1** Scan the QR Code or use the link to access your Subject Specific App - <https://www.playlab.ai/project/cmdw6fr442g3fnd0u9ffjfso>



- 2.2** Have a chat with the Subject Specific App (NTS 3j).

E.g.

- Select a section and the number of lessons you have in a week to start the App
- Provide information about your class. For instance, the number of learners in your class, etc.
- Select a week you are interested in and continue chatting with your App
- Refer to your Teacher Manual and confirm the information provided by the App or otherwise



Note

Always refer to your Teacher Manual to confirm the information the App provides.

- 2.3** Explore the following key areas using the App (NTS 2b, 2c, 2e and 3a-3q)

E.g.

a. Learning activities

I have a 60 minute lesson in a rural farming community in Lawra without enough tables and chairs. I can have my lesson outside the classroom if possible.

b. Assessments

Based on the recommended assessments for the week how can I assess my learners at level 2 at the end of the lesson. I want to give one question during the lesson and one at the end as homework

c. Differentiation strategies

There are two learners in wheelchairs. Another one cannot hear unless you speak very loudly. Finally, 5 learners are comfortable in the local language than in English. How can they be catered for in the lesson and assessment?

Hint



Remember to ask your App to help you add 21st Century Skills, National Values, GESI and SEL to your learning activities, assessment, etc., where applicable.

2.4 Share your experience with the larger group (NTS 3j).

- a. two things you learnt using the App and how you plan to apply them.
- b. two advantages of using the App
- c. two disadvantages of using the App without the appropriate curriculum materials (e.g. Teacher Manual, etc.)

3.0 Reflection

3.1 Reflect and share your views on the session (NTS1a, 1b).

3.2 Remember to read PLC Session 0.5 and bring along your laptop in preparation for next week's session.

PLC SESSION 0.5: Using the Subject Specific App to deliver assessments at appropriate DoK levels

1.0 Introduction (10 minutes)

- 1.1** Read and discuss the purpose, Learning Outcome (LO) and Learning Indicators (LIs) for the session

Purpose: The purpose of this session is to refresh our knowledge and understanding of assessment in the SHS curriculum. WAEC's visits to schools show that teachers are generally doing well with setting assessment tasks at DoK Levels 1 and 2 but there are issues with Levels 3 and 4. This session will look at how the subject specific App can assist teachers in developing assessments at all DoK Levels.

Learning Outcome (LO): To strengthen teachers' skills and competencies in developing assessment tasks and items to reflect all the DoK Levels (NTS 3k, 3o-3p).

Learning Indicator (LI) 1: Use the subject specific App to develop assessments linked to the learning indicators and the required DoK levels.

Learning Indicator (LI) 2: Use the subject specific App to review existing assessments to check whether they are linked to the required Learning Indicators and DoK levels.

2.0 Planning and Delivering of Assessment using the Subject Specific App (65 minutes)

- 2.1** Open your App and have a chat with it.

E.g.

- a. Select a section and the number of lessons you have in a week to start the App*
- b. Provide information about your class. For instance, the number of learners in your class, etc.*

- c. *Select a week you are interested in and continue chatting with your App*
- d. *Refer to your Teacher Manual and confirm the information provided by the App or otherwise.*

2.2 Explore assessment using the App (NTS 3h, 3j and 3o–3q)

E.g.

Select Assessment

- a. *Look at the LIs for the week and select the appropriate DoK Level or Levels required for the week's lesson. For instance, 'the LI requires modelling, I would like to assess at level 3'*
- b. *Review the responses on the formats from your App, select any that meets your needs or continue chatting with your App to provide other assessment formats.*
- c. *Continue chatting with your App, for instance*
 - i. *'suggest 10 scenario based MCQs'*
 - ii. *'suggest level 3 task taking into consideration the learning activities and differentiation'*
 - iii. *Generate marking scheme for the task and add an explanation why an option is the right answer*



Note

Check that the MCQs are arranged alphabetically, vertically and the options are of similar length

- d. *Now repeat the process for different assessment strategies, for instance*
 - i. *Essay questions at level 3*
 - ii. *Case study questions at level 4*
 - iii. *3 week project task at level 4, etc.*



Note

You may select a different section or week for Activity 2.2d

2.3 Use the subject specific App to review the task or items you developed by having a chat with the App to provide justifications as to why the task is at DoK level 3 or 4 (NTS 3j, 3k, 3m 3o and 3p–3q).

E.g.

Explain why the tasks or items are at DoK level 3.

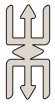


Note

You may repeat this for DoK levels 1, 2 or 4.

3.0 Using your subject specific App to explore one of the key assessment modes

- 3.1** Identify and select an assessment mode you found challenging in the last academic year and explore with your subject specific App how to use this assessment strategy effectively in your lesson delivery (NTS 3k).



Note

- i. Chatting once may not be enough for the App to provide all that you may need for the tasks.*
- ii. Remember to ask your App to help you add 21st Century Skills, National Values, GESI and SEL to your learning activities, assessment, etc., where applicable.*

- 3.2** Share your experience with the larger group (NTS 3j).
- a.** two things you learnt using the App in developing assessments
 - b.** how you plan to apply the experiences
 - c.** any challenges you faced in using the App to develop assessments and how you addressed them

4.0 Reflection (15 minutes)

- 4.1** Reflect and share your views on the session (NTS 1a, 1b)

- 4.2** Remember to

- a.** read PLC Session 1, Teacher Manual and related Learner Material (NTS 3a).
- b.** Bring along your laptop, Teacher Manual and PLC Handbook on Week 1 in preparation for the next session (NTS 3a).

PLC Session 1: Internal Structure of the Earth

1.0 Introduction (10 minutes)

Read and discuss the purpose, Learning Outcome (LO) and Learning Indicators (LIs) for the session.

Purpose: The purpose of this session is to populate the learning planner for Week 1 on *Internal Structure of the Earth* with the needed areas and use the subject-specific App to review the completed learning plan.

Learning Outcome (LO): To populate the learning planner on the *Internal Structure of the Earth* with essential questions, learning activities, key notes on differentiation and key assessments and to use the subject-specific App to review your populated learning plan (NTS 2b, 2c, 2e, 2f, 3a, 3d, 3e, 3g-3k and 3o).

Learning Indicator (LI) 1: Populate the learning planner on Week1 using the subject specific App.

Learning Indicator (LI) 2: Enact an activity based on your learning plan.

2.0 Planning and Reviewing of Learning Plan (50 minutes)

- 2.1** Refer to your Teacher Manual and have a chat with your subject-specific App to develop your learning plan for Week1 on the internal structure of the Earth (NTS 3a-3q).

E.g.

i. Essential questions

The lesson for Week1 is on the Internal Structure of the Earth. Develop two essential questions to support the teacher's delivery, and one essential question for learners to encourage critical thinking and discussion, etc.

ii. Learning activities

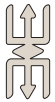
Identify the learning indicator for Week1 and plan a two-hour learning activity for that week's lesson for a class of 40 learners with different proficiency levels and one visually impaired learner. Include the resources needed to deliver the lesson at Garu SHS, Northern Ghana, etc.

iii. Differentiation

Design differentiated activities to accommodate all learners with varying proficiency levels and the visually impaired student in the class, etc.

iv. Assessment tasks

Provide the assessment mode for Week1 and develop two formative assessment tasks and four summative assessment items to reflect the required DoK levels of the learning indicator, considering the diverse needs of all learners.



Note

- i. Chatting once may not be enough for the App to provide all that you may need for the tasks.
- ii. Transfer the information from your SS App into your learning planner template to complete your plans. Click the link or scan the QR code to download the template <https://curriculumresources.edu.gh/wp-content/uploads/2025/09/Year-Two-Lesson-Planner-Template-20.docx>
- iii. Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.



3.0 Enacting (20 minutes)

- 3.1 Enact a teaching activity in your plan (NTS 1b, 1f, 1g, 2c, 2e, 2f and 3c-3j).
- 3.2 Reflect on the activity enacted to improve lesson delivery (NTS 1a).
- 3.3 Ask for feedback on the activity enacted (NTS 1a, 1e, 2c and 3o).



Note

You may record the enacted activity.

4.0 Reflection (10 minutes)

- 4.1** Reflect and share your views on the session (NTS 1a, 1b).
- 4.2** Identify a critical friend to observe your lesson in relation to PLC Session 1 to provide feedback on your lesson (NTS 1f, 1g).
- 4.3** Remember to:
 - a.** Read PLC Session 2, Teacher Manual and related Learner Material (NTS 3a).
 - b.** Bring along your laptop, Teacher Manual and PLC Handbook in preparation for the next session (NTS 3a).
 - c.** Identify areas you find challenging in your teaching for discussion during the next session.

PLC Session 2: Preparing for Student Transcript Portal Assessment – Portfolio

1.0 Introduction (10 minutes)

- 1.1 Share one thing on the assessment in the PLC Session 1 that you
 - a. applied in your lesson delivery
 - b. found challenging and how you addressed it.
- 1.2 Share one challenge you encountered while populating your learning plan for Week 2 before the session that you would like to discuss during this PLC session.
- 1.3 Read and discuss the Purpose, Learning Outcome (LO) and Learning Indicators (LIs) for the session.

Purpose: The purpose of this session is to use the subject-specific App to

1. review the completed learning plan for Week 2
2. prepare assessment tasks and rubrics for portfolio

Learning Outcome (LO): To review the learning plan for Week 2 and address any challenges in planning and developing assessment tasks for the portfolio (NTS 2b, 2c, 2e, 2f, 3a, 3d, 3e, 3g–3k and 3o).

Learning Indicator (LI) 1: Review the learning plan and address challenges in the preparation and delivery of a lesson.

Learning Indicator (LI) 2: Discuss, develop and review assessment tasks with rubrics for the portfolio.

2.0 Reviewing the Learning Plan (20 minutes)

- 2.1 Upload your completed learning plan into the subject-specific App. Have a chat with your App to verify the following and discuss their suitability to reflect the diverse needs of learners in your class (NTS 1a, 2b, 2c and 3e–3q).

E.g.

Learning activities

With reference to the attached Week 2 learning plan, review the learning activities and suggest how they can achieve the lesson within a two-hour duration, taking into consideration the diverse needs of learners in the class, etc.

Hint



Continue chatting with your App to verify the following and use the responses to complete your plan

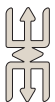
- a) essential questions
- b) differentiation
- c) assessment tasks, etc.

3.0 Prepare to Assign, Assess and Record Key Assessment in the Student Transcript Portal (50 minutes)

- 3.1** Refer to your Teacher Manual for the key assessment to be recorded in the Student Transcript Portal and have a chat with the subject-specific App to review or develop your assessment tasks and mark schemes/rubrics (NTS 2a–2c, 2e–2h and 3j–3q).

E.g.

- i. *Portfolio is the key assessment task for this week. Review the guidelines for portfolio assessment in the Teacher Manual in Appendix A, in section 1, and suggest areas for improvement.*
- ii. *Besides the guidelines in the Teacher Manual in Appendix A, propose an alternative, simpler yet detailed guideline for portfolio assessment that accommodates learners with varying proficiency levels and includes considerations for a visually impaired learner, etc.*



Note

One prompt may not be enough for the App to provide all that you may need for the tasks

- 3.2** Have a chat with your App to verify the suggested assessment tasks and discuss the suitability of the responses from activity 3.1. Use the

suggestions to refine the assessment tasks (NTS 1a, 2b, 2c and 3e–3q). In doing this activity, consider:

E.g.

i. Task

Check if the task guideline is clear to all learners. Make suggestions where necessary to improve it, and so on. Suggest a strategy that can be adopted to assign the task to learners.

ii. Mark scheme and score distribution

Check if the marks distribution is accurate. Provide suggestions for improvement, etc.

iii. Resources needed for assessment administration

Suggest the appropriate resources to administer the task, etc.

iv. How to provide feedback

Suggest an appropriate way to provide feedback on the portfolio. Consider the results after marking, etc.



Note

Use the responses to complete your plan

4.0 Reflection (10 minutes)

4.1 Reflect and share your views on the session (NTS 1a, 1b).

4.2 Identify a colleague to observe your lesson in relation to PLC Session 2 to provide feedback on your lesson (NTS 1f, 1g).

4.3 Remember to:

- a.** Mark, record and upload your learners' assessment scores in the Student Transcript Portal (NTS 3j, 3n).
- b.** Read PLC Session 3, Teacher Manual and related Learner Material (NTS 3a).
- c.** Bring along your laptop, Teacher Manual and PLC Handbook in preparation for the next session (NTS 3a).
- d.** Identify areas you found challenging in your teaching and administering of the portfolio assessment for discussion during the next session.

PLC Session 3: Preparing for Student Transcript Portal Assessment – Group Project

1.0 Introduction (10 minutes)

- 1.1 Share one thing on assessment in PLC Session 2 that you
 - a. applied in your lesson delivery
 - b. found challenging and how you addressed it.
- 1.2 Share one challenge you encountered while populating your learning plan for Week3 before the session that you would like to discuss during this PLC session.
- 1.3 Read and discuss the Purpose, Learning Outcome (LO) and Learning Indicators (LIs) for the session.

Purpose: The purpose of this session is to use the subject-specific App to

- 1. review the completed learning plan for Week 3
- 2. prepare assessment tasks and rubrics for group project

Learning Outcome (LO): To review the learning plan for Week3 and address any challenges in planning and developing assessment tasks for the group project (NTS 2b, 2c, 2e, 2f, 3a, 3d, 3e, 3g-3k and 3o).

Learning Indicator (LI) 1: Review the learning plan and address challenges in the preparation and delivery of a lesson.

Learning Indicator (LI) 2: Discuss, develop and review assessment tasks with rubrics for the group project.

2.0 Reviewing the Learning Plan (20 minutes)

- 2.1 Upload your completed learning plan into the subject-specific App. Have a chat with your App to verify the following and discuss their suitability to reflect the diverse needs of learners in your class (NTS 1a, 2b, 2c and 3e-3q).

E.g.

Assessment

With reference to the attached Week 3 learning plan, review the assessment task to verify whether it corresponds to the DoK level in the Teacher Manual, and cater for learners with different proficiency levels and the visually impaired learner, etc.

Hint



Continue chatting with your App to verify the following and use the responses to complete your plan

- a) essential questions
- b) differentiation
- c) learning activities, etc.

3.0 Prepare to Assign, Assess and Record Key Assessment in the Student Transcript Portal (50 minutes)

- 3.1** Refer to your Teacher Manual for the key assessment to be recorded in the Student Transcript Portal and have a chat with the subject-specific App to review or develop your assessment tasks and mark schemes/rubrics (NTS 2a–2c, 2e–2h and 3j–3q).

E.g.

Group Project

The assessment task for this Week is group project. Refer to the Teacher Manual in Appendix B, Section 1. Develop a similar group project, suggest how the project can be assigned to learners and a scoring rubric. Consider learners with varying proficiency levels and the visually impaired learner. Include the resources required for delivering the lesson in Garu, Northern Ghana. etc.



Note

One prompt may not be enough for the App to provide all that you may need for the tasks

- 3.2** Have a chat with your App to verify the suggested assessment tasks and discuss the suitability of the responses from activity 3.1. Use the suggestions to refine the assessment tasks (NTS 1a, 2b, 2c and 3e–3q). In doing this activity, consider:

E.g.

i. Task

Verify if the task is achievable. Make recommendations where needed to improve it, etc.

ii. Mark scheme and score distribution

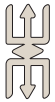
Check whether the marks are fairly distributed and provide suggestions on how to improve it, etc.

iii. Resources needed for assessment administration

Suggest suitable resources required for the project assessment, etc.

iv. How to provide feedback

Suggest appropriate ways of providing feedback to learners on the group project, etc.



Note

Use the responses to complete your plan

4.0 Reflection (10 minutes)

4.1 Reflect and share your views on the session (NTS 1a, 1b).

4.2 Identify a colleague to observe your lesson in relation to PLC Session 3 to provide feedback on your lesson (NTS 1f, 1g).

4.3 Remember to:

- a.** Mark, record and upload your learners' assessment scores in the Student Transcript Portal (NTS 3j, 3n).
- b.** Read PLC Session 4, Teacher Manual and related Learner Material (NTS 3a).
- c.** Bring along your Teacher Manual and PLC Handbook in preparation for the next session (NTS 3a).
- d.** Identify areas you found challenging in your teaching and administering of the group project assessment for discussion during the next session.

PLC Session 4: Plains and their Importance

1.0 Introduction (5 minutes)

- 1.1 Share one thing you applied in your classroom based on PLC Session 3
 - a. the challenges you faced
 - b. how you addressed them
- 1.2 Have you developed your learning plan for Week 4?
 - a. If you answered **yes**, conduct your PLC Session from Activity 2.0B
 - b. If you answered **no**, conduct your PLC Session from Activity 2.0A

Hint



You cannot conduct PLC on Activity 2.0B if you **have not** prepared your learning plan

2.0A Planning and Reviewing of Learning Plan (50 minutes)

Purpose: The purpose of this session is to populate the learning planner for Week 4 on *plains and their importance* using the subject specific App.

Learning Outcome (LO): To populate the learning planner with the essential questions, differentiation, learning activities and key assessments and use the subject specific App to review your populated learning plan (NTS 2b, 2c, 2e, 2f, 3a, 3d, 3e, 3g-3k and 3o).

Learning Indicator (LI) 1: Populate the learning planner using the subject specific App

Learning Indicator (LI) 2: Enact an activity from your reviewed learning plan.

2.1 Refer to your Teacher Manual and have a chat with your subject specific App to develop your learning plan for Week 4 on *plains and their importance* (NTS 1a, 2b, 2c, 2e–2h and 3a–3q).

E.g.

i. Essential questions

Develop two essential questions to support the teacher's delivery, and one essential question for learners, encouraging critical thinking and discussion, etc.

ii. Differentiation

Provide differentiation strategies to accommodate learners with mixed learning abilities in the class, etc.

iii. Learning activities

Create suitable learning activities to support the lesson for two hours, considering varied learning abilities in the class, etc.

iv. Assessment tasks

Identify the assessment mode for Week 4 and develop two formative assessment tasks and four summative test items to reflect the Dok level(s) recommended in the Teacher Manual. Provide a mark scheme/rubric for each question, etc.



Note

- i.** *Chatting once may not be enough for the App to provide all that you may need for the tasks*
- ii.** *Transfer the information from your SS App into your learning planner template to complete your plans.*
- iii.** *Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.*

Hint



Move to Activity 3.0

2.0B Reviewing the Learning Plan and Addressing Challenges in Planning, Delivering and Assessing Lessons (50 Minutes)

Purpose: To support teachers, address challenges they may have during lesson preparation and delivery.

Learning Outcome (LO): To address specific concerns of teachers in planning, teaching and assessment.

Learning Indicator (LI) 1: Address challenges in the preparation and delivery of a lesson.

Learning Indicator (LI) 2: Enact an activity in preparation to teach the lesson.

- 2.1** Upload your completed learning plan into the subject specific App. Have a chat with your App to verify the following and discuss their suitability to reflect the diverse needs of learners in your class (NTS 1a, 2b, 2c and 3e–3q).

E.g.

Learning activities

Study the learning plan attached. Check whether the learning activities can be achieved in two hours and whether the appropriate teaching resources have been provided to cater for learners with varying proficiency levels and the visually impaired learner, etc.

Hint



Continue chatting with your App to verify the following and use the responses to complete your plan

- a) essential questions
- b) differentiation
- c) assessment tasks, etc.



Note

- i. Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii. Transfer the information from your SS App into your learning planner template to complete your plans.
- iii. Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

- 2.2** Identify a challenging area or issue and chat with your subject specific App for steps on how to address it for effective lesson delivery (NTS 3j).
- 2.3** Share your experience with the group.

3.0 Enactment (25 minutes)

- 3.1** Enact a teaching activity in your plan (NTS 1b, 1f, 1g, 2c, 2e, 2f and 3c–3j).
- 3.2** Reflect on the activity enacted to improve lesson delivery (NTS 1a).
- 3.3** Ask for feedback on the activity enacted (NTS 1a, 1e, 2c and 3o).



Note

You may record the enacted activity.

4.0 Reflection (10 minutes)

- 4.1** Reflect and share your views on the session (NTS 1a, 1b).
- 4.2** Identify a colleague to observe your lesson in relation to PLC Session 4 to provide feedback on your lesson (NTS 1f, 1g).
- 4.3** Remember to:
 - a.** Read PLC Session 5, Teacher Manual and related Learner Material (NTS 3a).
 - b.** Bring along your laptop, Teacher Manual and PLC Handbook in preparation for the next session (NTS 3a).
 - c.** Identify areas you find challenging in your teaching for discussion during the next session.

PLC Session 5: Techniques of Map Enlargement and Reduction

1.0 Introduction (5 minutes)

- 1.1 Share one thing you applied in your classroom based on PLC Session 4
 - a. the challenges you faced
 - b. how you addressed them
- 1.2 Have you developed your learning plan for Week 5?
 - a. If you answered **yes**, conduct your PLC Session from Activity 2.0B
 - b. If you answered **no**, conduct your PLC Session from Activity 2.0A

Hint



You cannot conduct PLC on Activity 2.0B if you **have not** prepared your learning plan

2.0A Planning and Reviewing of Learning Plan (50 minutes)

Purpose: The purpose of this session is to populate the learning planner for Week 5 on *techniques of Map enlargement and reduction* using the subject specific App.

Learning Outcome (LO): To populate the learning planner with the essential questions, differentiation, learning activities and key assessments and use the subject specific App to review your populated learning plan (NTS 2b, 2c, 2e, 2f, 3a, 3d, 3e, 3g-3k and 3o).

Learning Indicator (LI) 1: Populate the learning planner using the subject specific App

Learning Indicator (LI) 2: Enactment an activity from your reviewed learning plan.

2.1 Refer to your Teacher Manual and have a chat with your subject specific App to develop your learning plan for Week 5 on *techniques of Map enlargement and reduction* (NTS 1a, 2b, 2c, 2e–2h and 3a–3q).

E.g.

i. Essential questions

The lesson for Week 5 is on the techniques of map enlargement and reduction. Create two essential questions to support the teacher's delivery, and one essential question for learners support critical thinking and discussion.

ii. Differentiation

There are 37 learners; 27 are approaching proficiency, 10 are proficient, and one is visually impaired. Create differentiated activities that support all learners, ensuring full participation and understanding.

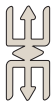
iii. Learning activities

Identify suitable pedagogies to support the lesson and develop appropriate learning activities for a 2-hour session, accommodating learners with different proficiency levels and the visually impaired, etc.

iv. Assessment tasks

Refer to the Teacher Manual for the recommended assessment mode for Week 5.

Write one formative assessment task and three summative assessment tasks to reflect the required DoK levels in the Teacher Manual. Provide a mark scheme or rubric for each task, etc.



Note

- i. Chatting once may not be enough for the App to provide all that you may need for the tasks*
- ii. Transfer the information from your SS App into your learning planner template to complete your plans.*
- iii. Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.*

Hint



Move to Activity 3.0

2.0B Reviewing the Learning Plan and Addressing Challenges in Planning, Delivering and Assessing Lessons (50 Minutes)

Purpose: To support teachers in addressing challenges they may have during lesson preparation and delivery.

Learning Outcome (LO): To address specific concerns of teachers in planning, teaching and assessment.

Learning Indicator (LI) 1: Address challenges in the preparation and delivery of a lesson.

Learning Indicator (LI) 2: Enact an activity in preparation to teach the lesson.

- 2.1** Upload your completed learning plan into the subject specific App. Have a chat with your App to verify the following and discuss their suitability to reflect the diverse needs of learners in your class (NTS 1a, 2b, 2c and 3e-3q).

E.g.

Essential questions

Review the attached learning plan to determine whether the essential questions encourage critical thinking and real-world application, and if they can serve as an instructional guide for the teacher.

Provide suggestions where needed for improvement, etc.

Hint



Continue chatting with your App to verify the following and use the responses to complete your plan

- a) learning activities
- b) differentiation
- c) assessment tasks, etc.



Note

- i. Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii. Transfer the information from your SS App into your learning planner template to complete your plans.
- iii. Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

2.2 Identify a challenging area or issue and chat with your subject specific App for steps on how to address it for effective lesson delivery (NTS 3j).

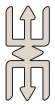
2.3 Share your experience with the group.

3.0 Enactment (25 minutes)

3.1 Enact a teaching activity in your plan (NTS 1b, 1f, 1g, 2c, 2e, 2f and 3c–3j).

3.2 Reflect on the activity enacted to improve lesson delivery (NTS 1a).

3.3 Ask for feedback on the activity enacted (NTS 1a, 1e, 2c and 3o).



Note

You may record the enacted activity.

4.0 Reflection (10 minutes)

4.1 Reflect and share your views on the session (NTS 1a, 1b).

4.2 Identify a colleague to observe your lesson in relation to PLC Session 5 to provide feedback on your lesson (NTS 1f, 1g).

4.3 Remember to:

- a.** Read PLC Session 6, Teacher Manual and related Learner Material (NTS 3a).
- b.** Bring along your laptop, Teacher Manual and PLC Handbook in preparation for the next session (NTS 3a).
- c.** Identify areas you find challenging in your teaching for discussion during the next session.

PLC Session 6: Preparing for Mid-Semester Examination

1.0 Introduction (10 minutes)

- 1.1 Share one thing on assessment in PLC Session 5 that you
 - a. applied in your lesson delivery
 - b. found challenging and how you addressed it.
- 1.2 Share one challenge you encountered while populating your learning plan for Week 6 before the session that you would like to discuss during this PLC session.
- 1.3 Read and discuss the Purpose, Learning Outcome (LO) and Learning Indicators (LIs) for the session.

Purpose: The purpose of this session is to use the subject-specific App to

1. review the completed learning plan for Week 6
2. prepare assessment tasks and rubrics for mid-semester examination

Learning Outcome (LO): To review the learning plan for Week 6 and address any challenges in planning and developing assessment tasks for the mid-semester examination (NTS 2b, 2c, 2e, 2f, 3a, 3d, 3e, 3g-3k and 3o).

Learning Indicator (LI) 1: Review the learning plan and address challenges in the preparation and delivery of a lesson.

Learning Indicator (LI) 2: Discuss, develop and review assessment tasks with rubrics for the mid-semester examination.

2.0 Reviewing the Learning Plan (20 minutes)

- 2.1 Upload your learning plan into the subject-specific App. Have a chat with your App to verify the following and discuss their suitability to reflect the diverse needs of learners in your class (NTS 1a, 2b, 2c and 3e-3q).

E.g.

Learning activities

Refer to the uploaded learning plan and review the learning activities for the lesson to accommodate learners with different proficiency levels and the visually impaired learner; then, provide suggestions where appropriate.

Hint



Continue chatting with your App to verify the following and use the responses to complete your plan

- a) essential questions
- b) differentiation
- c) assessment tasks, etc.

3.0 Prepare for mid-Semester Examination (50 minutes)

- 3.1** Refer to your Teacher Manual for the format of the mid-semester examination and use the subject-specific App to review or develop your assessment tasks, mark schemes/rubrics, etc. (NTS 2a-2c, 2e-2h and 3j-3q).

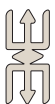
E.g.

The mid-semester assessment task is supposed to cover all indicators from weeks 1 to 5. Provide all indicators from weeks 1 to 5 and their respective DoK levels, etc.

Based on the response provided on the indicators for weeks 1 to 5 and their respective Dok level. Suggest:

1. 30 MCQs, eight fill-in/Supply questions, and two definition questions distributed as follows: 30% Dok level 1, 40% Dok level 2, and 30% Dok level 3
2. One compulsory map-based question at DoK level 2 or 3
3. Two essay questions at DoK level 3

Provide rubrics/mark schemes for each of the tasks, etc



Note

In preparing for mid-semester or end-of-semester examination, one prompt may not be enough for the App to provide all you need (DoK levels, structure, distribution across DoK levels, etc.)

- 3.2** Have a chat with your App to review the suggested assessment tasks and discuss the suitability of the responses from activity 3.1. Use the review to refine the responses to complete the set questions (NTS 1a, 2b, 2c and 3e–3q). In doing this activity, consider:

E.g.

- i. Whether the assessment tasks generated follow 30%, 40%, 30% DoK distribution**

Check whether the assessment test items follow the 30:40:30 DoK distribution, the MCQs meet the criteria for writing MCQs, and have good distractors. Suggest recommendations, etc.

- ii. Mark scheme and score distribution**

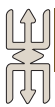
Check whether the rubric/mark scheme aligns with the tasks and whether the mark distribution is accurate, etc.

- iii. Resources needed for assessment administration**

Suggest appropriate resources required for administering the assessment task that can accommodate learners with different proficiency levels and the visually impaired learner. Etc.

- iv. How to provide feedback**

Suggest ways to provide feedback to the learners, etc.



Note

Use the responses to complete your plan

4.0 Reflection (10 minutes)

- 4.1** Reflect and share your views on the session (NTS 1a, 1b).
- 4.2** Identify a colleague to observe your lesson in relation to PLC Session 6 to provide feedback on your lesson (NTS 1f, 1g).
- 4.3** Remember to:
- Mark, record and upload your learners' assessment scores in the Student Transcript Portal (NTS 3j, 3n).
 - Read PLC Session 7, Teacher Manual and related Learner Material (NTS 3a).
 - Bring along your laptop, Teacher Manual and PLC Handbook in preparation for the next session (NTS 3a).
 - Identify areas you found challenging in your planning and administering of the assessment for discussion during the next session.

PLC Session 7: Directions and Bearings

1.0 Introduction (5 minutes)

- 1.1 Share one thing you applied in your classroom based on PLC Session 6
 - a. the challenges you faced
 - b. how you addressed them
- 1.2 Have you developed your learning plan for Week 7?
 - a. If you answered **yes**, conduct your PLC Session from Activity 2.0B
 - b. If you answered **no**, conduct your PLC Session from Activity 2.0A

Hint



You cannot conduct PLC on Activity 2.0B if you **have not** prepared your learning plan

2.0A Planning and Reviewing of Learning Plan (50 minutes)

Purpose: The purpose of this session is to populate the learning planner for Week 7 on *directions and bearings* using the subject specific App.

Learning Outcome (LO): To populate the learning planner with the essential questions, differentiation, learning activities and key assessments and use the subject specific App to review your populated learning plan (NTS 2b, 2c, 2e, 2f, 3a, 3d, 3e, 3g-3k and 3o).

Learning Indicator (LI) 1: Populate the learning planner using the subject specific App

Learning Indicator (LI) 2: Enact an activity from your reviewed learning plan.

- 2.1 Refer to your Teacher Manual and have a chat with your subject specific App to develop your learning plan for Week 7 on *directions and bearings* (NTS 1a, 2b, 2c, 2e-2h and 3a-3q).

E.g.

i. Essential questions

Suggest two essential questions to guide the learning process of directions and bearings with one focusing on teacher instructions and the other on learners' critical thinking and application of concepts.

ii. Differentiation

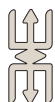
Design diverse learning activities that cater to learners at different proficiency levels and the visually impaired learner in the class, etc.

iii. Learning activities

Identify the learning indicator for Week 7 and develop varied learning activities that meet the needs of learners at different proficiency levels and the visually impaired learner for a two-hour lesson. Ensure the incorporation of 21st Century skills, etc.

iv. Assessment tasks

Identify the assessment mode for Week 7 as recommended in the Teacher Manual, and develop two formative assessment tasks and two summative assessment tasks that reflect the DoK levels of the indicator, etc.



Note

- i.** Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii.** Transfer the information from your SS App into your learning planner template to complete your plans.
- iii.** Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

Hint



Move to Activity 3.0

2.0B Reviewing the Learning Plan and Addressing challenges in planning, delivering and assessing lessons (50 minutes)

Purpose: To support teachers address challenges they may have during lesson preparation and delivery.

Learning Outcome (LO): To address specific concerns of teachers in planning, teaching and assessment.

Learning Indicator (LI) 1: Address challenges in the preparation and delivery of a lesson.

Learning Indicator (LI) 2: Enact an activity in preparation to teach the lesson.

- 2.1** Upload your completed learning plan into the subject specific App. Please have a chat with your App to verify the following and discuss their suitability to reflect the diverse needs of learners in your class (NTS 1a, 2b, 2c and 3e–3q).

E.g.

Assessment tasks

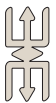
Check whether the assessment tasks in the learning plan align with the mode of assessment for the Week and meet the DoK levels prescribed in the Teacher Manual. Offer appropriate suggestions for improvement, etc.

Hint



Continue chatting with your App to verify the following and use the responses to complete your plan

- a) learning activities
- b) differentiation
- c) essential questions, etc.



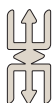
Note

- i. *Chatting once may not be enough for the App to provide all that you may need for the tasks*
- ii. *Transfer the information from your SS App into your learning planner template to complete your plans.*
- iii. *Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.*

- 2.2** Identify a challenging area or issue and chat with your subject specific App for steps on how to address it for effective lesson delivery (NTS 3j).
- 2.3** Share your experience with the group.

3.0 Enactment (25 minutes)

- 3.1** Enact a teaching activity in your plan (NTS 1b, 1f, 1g, 2c, 2e, 2f and 3c–3j).
- 3.2** Reflect on the activity enacted to improve lesson delivery (NTS 1a).
- 3.3** Ask for feedback on the activity enacted (NTS 1a, 1e, 2c and 3o).



Note

You may record the enacted activity.

4.0 Reflection (10 minutes)

- 4.1** Reflect and share your views on the session (NTS 1a, 1b).
- 4.2** Identify a colleague to observe your lesson in relation to PLC Session 7 to provide feedback on your lesson (NTS 1f, 1g).
- 4.3** Remember to:
 - a.** Read PLC Session 8, Teacher Manual and related Learner Material (NTS 3a).
 - b.** Bring along your laptop, Teacher Manual and PLC Handbook in preparation for the next session (NTS 3a).
 - c.** Identify areas you find challenging in your teaching for discussion during the next session.

PLC Session 8: Sectional Profile

Drawing and Calculation of Gradient

1.0 Introduction (5 minutes)

- 1.1** Share one thing you applied in your classroom based on PLC Session 7
- the challenges you faced
 - how you addressed them
- 1.2** Have you developed your learning plan for Week 8?
- If you answered **yes**, conduct your PLC Session from Activity 2.0B
 - If you answered **no**, conduct your PLC Session from Activity 2.0A

Hint



You cannot conduct PLC on Activity 2.0B if you **have not** prepared your learning plan

2.0A Planning and Reviewing of Learning Plan (50 minutes)

Purpose: The purpose of this session is to populate the learning planner for Week 8 on *sectional profile drawing and calculation of gradient* using the subject specific App.

Learning Outcome (LO): To populate the learning planner with the essential questions, differentiation, learning activities and key assessments and use the subject specific App to review your populated learning plan (NTS 2b, 2c, 2e, 2f, 3a, 3d, 3e, 3g-3k and 3o).

Learning Indicator (LI) 1: Populate the learning planner using the subject specific App

Learning Indicator (LI) 2: Enact an activity from your reviewed learning plan.

2.1 Refer to your Teacher Manual and have a chat with your subject specific App to develop your learning plan for Week 8 on *sectional profile drawing and calculation of gradient* (NTS 1a, 2b, 2c, 2e–2h and 3a–3q).

E.g.

i. Essential questions

Develop two essential questions to support the teacher's delivery, and one essential question for learners to encourage critical thinking and discussion.

ii. Differentiation

Design differentiated activities that cater for the learning needs of the visually impaired learner and other learners across different proficiency levels during a lesson on sectional profile drawing and calculation of gradient, etc.

iii. Learning activities

Design a two-hour learning activity for Week 8's lesson on sectional profile drawing and calculation of gradient for all learners with different proficiency levels, including the visually impaired learner in the class.

iv. Assessment tasks

Identify the assessment mode for Week 8 and write three formative assessment tasks and two summative test items to reflect the required DoK levels of the indicator in the Teacher Manual. Add a rubric/marking scheme to each assessment task, etc.



Note

- i.** Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii.** Transfer the information from your SS App into your learning planner template to complete your plans.
- iii.** Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

Hint



Move to Activity 3.0

2.0B Reviewing the Learning Plan and Addressing Challenges in Planning, Delivering and Assessing Lessons (50 Minutes)

Purpose: To support teachers address challenges they may have during lesson preparation and delivery.

Learning Outcome (LO): To address specific concerns of teachers in planning, teaching and assessment.

Learning Indicator (LI) 1: Address challenges in the preparation and delivery of a lesson.

Learning Indicator (LI) 2: Enact an activity in preparation to teach the lesson.

- 2.1** Upload your completed learning plan into the subject specific App. Have a chat with your App to verify the following and discuss their suitability to reflect the diverse needs of learners in your class (NTS 1a, 2b, 2c and 3e–3q).

E.g.

Assessment tasks

Check whether the assessment mode in the attached learning plan for Week 8 reflects the content in the Teacher Manual and the DoK levels, etc.

Hint



Continue chatting with your App to verify the following and use the responses to complete your plan

- a) essential questions
- b) differentiation
- c) learning activities, etc.



Note

- i. Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii. Transfer the information from your SS App into your learning planner template to complete your plans.
- iii. Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

- 2.2** Identify a challenging area or issue and chat with your subject specific App for steps on how to address it for effective lesson delivery (NTS 3j).
- 2.3** Share your experience with the group.

3.0 Enactment (25 minutes)

- 3.1** Enact a teaching activity in your plan (NTS 1b, 1f, 1g, 2c, 2e, 2f and 3c–3j).
- 3.2** Reflect on the activity enacted to improve lesson delivery (NTS 1a).
- 3.3** Ask for feedback on the activity enacted (NTS 1a, 1e, 2c and 3o).



Note

You may record the enacted activity.

4.0 Reflection (10 minutes)

- 4.1** Reflect and share your views on the session (NTS 1a, 1b).
- 4.2** Identify a colleague to observe your lesson in relation to PLC Session 8 to provide feedback on your lesson (NTS 1f, 1g).
- 4.3** Remember to:
 - a.** Read PLC Session 9, Teacher Manual and related Learner Material (NTS 3a).
 - b.** Bring along your laptop, Teacher Manual and PLC Handbook in preparation for the next session (NTS 3a).
 - c.** Identify areas you find challenging in your teaching for discussion during the next session.

PLC Session 9: Location, Size and Political Divisions of West Africa and Africa

1.0 Introduction (5 minutes)

- 1.1 Share one thing you applied in your classroom based on PLC Session 8
 - a. the challenges you faced
 - b. how you addressed them
- 1.2 Have you developed your learning plan for Week 9?
 - a. If you answered **yes**, conduct your PLC Session from Activity 2.0B
 - b. If you answered **no**, conduct your PLC Session from Activity 2.0A

Hint



You cannot conduct PLC on Activity 2.0B if you **have not** prepared your learning plan

2.0A Planning and Reviewing of Learning Plan (50 minutes)

Purpose: The purpose of this session is to populate the learning planner for Week 9 on *location, size and political divisions of West Africa and Africa* using the subject specific App.

Learning Outcome (LO): To populate the learning planner with the essential questions, differentiation, learning activities and key assessments and use the subject specific App to review your populated learning plan (NTS 2b, 2c, 2e, 2f, 3a, 3d, 3e, 3g-3k and 3o).

Learning Indicator (LI) 1: Populate the learning planner using the subject specific App

Learning Indicator (LI) 2: Enact an activity from your reviewed learning plan.

- 2.1** Refer to your Teacher Manual and have a chat with your subject specific App to develop your learning plan for Week 9 on *location, size and political divisions of West Africa and Africa* (NTS 1a, 2b, 2c, 2e–2h and 3a–3q).

E.g.

i. Essential questions

Develop two essential questions: one to guide the teacher's planning and delivery, and one to drive learners' inquiry, etc.

ii. Differentiation

Help me with how to differentiate the learning activities to support learners with diverse learning abilities, etc.

iii. Learning activities

Identify the learning indicator(s) for Week 9 and design two-hour learning activities for all learners with different proficiency levels, including the visually impaired learner in the class, and the resources that will be needed for the lesson, etc.

iv. Assessment tasks

Based on assessment mode and the required DoK levels in the Teacher Manual for Week 9, develop three formative assessment tasks and two summative assessment test items to meet. Add mark scheme for each task, etc.



Note

- i.** Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii.** Transfer the information from your SS App into your learning planner template to complete your plans.
- iii.** Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

Hint



Move to Activity 3.0

2.0B Reviewing the Learning Plan and Addressing challenges in planning, delivering and assessing lessons (50 minutes)

Purpose: To support teachers address challenges they may have during lesson preparation and delivery.

Learning Outcome (LO): To address specific concerns of teachers in planning, teaching and assessment.

Learning Indicator (LI) 1: Address challenges in the preparation and delivery of a lesson.

Learning Indicator (LI) 2: Enact an activity in preparation to teach the lesson.

- 2.1** Upload your completed learning plan into the subject specific App. Have a chat with your App to verify the following and discuss their suitability to reflect the diverse needs of learners in your class (NTS 1a, 2b, 2c and 3e–3q).

E.g.

Essential questions

Refer to the attached learning plan and assess whether the essential questions promote critical thinking and 21st-century skills. Offer suggestions for improvement, etc.

Hint



Continue chatting with your App to verify the following and use the responses to complete your plan

- a) learning activities
- b) differentiation
- c) assessment tasks, etc.



Note

- i. Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii. Transfer the information from your SS App into your learning planner template to complete your plans.
- iii. Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

2.2 Identify a challenging area or issue and chat with your subject specific App for steps on how to address it for effective lesson delivery (NTS 3j).

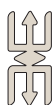
2.3 Share your experience with the group

3.0 Enactment (25 minutes)

3.1 Enact a teaching activity in your plan (NTS 1b, 1f, 1g, 2c, 2e, 2f and 3c–3j).

3.2 Reflect on the activity enacted to improve lesson delivery (NTS 1a).

3.3 Ask for feedback on the activity enacted (NTS 1a, 1e, 2c and 3o).



Note

You may record the enacted activity.

4.0 Reflection (10 minutes)

4.1 Reflect and share your views on the session (NTS 1a, 1b).

4.2 Identify a colleague to observe your lesson in relation to PLC Session 9 to provide feedback on your lesson (NTS 1f, 1g).

4.3 Remember to:

- a.** Read PLC Session 10, Teacher Manual and related Learner Material (NTS 3a).
- b.** Bring along your laptop, Teacher Manual and PLC Handbook in preparation for the next session (NTS 3a).
- c.** Identify areas you find challenging in your teaching for discussion during the next session.

PLC Session 10: Relief, Drainage, Climate and Vegetation of West Africa and Africa

1.0 Introduction (5 minutes)

- 1.1 Share one thing you applied in your classroom based on PLC Session 9
 - a. the challenges you faced
 - b. how you addressed them
- 1.2 Have you developed your learning plan for Week 10?
 - a. If you answered **yes**, conduct your PLC Session from Activity 2.0B
 - b. If you answered **no**, conduct your PLC Session from Activity 2.0A

Hint



You cannot conduct PLC on Activity 2.0B if you **have not** prepared your learning plan

2.0A Planning and Reviewing of Learning Plan (50 minutes)

Purpose: The purpose of this session is to populate the learning planner for Week10 on *relief, drainage, climate and vegetation of West Africa and Africa* using the subject specific App.

Learning Outcome (LO): To populate the learning planner with the essential questions, differentiation, learning activities and key assessments and use the subject specific App to review your populated learning plan (NTS 2b, 2c, 2e, 2f, 3a, 3d, 3e, 3g-3k and 3o).

Learning Indicator (LI) 1: Populate the learning planner using the subject specific App

Learning Indicator (LI) 2: Enact an activity from your reviewed learning plan.

2.1 Refer to your Teacher Manual and have a chat with your subject specific App to develop your learning plan for Week10 on *relief, drainage, climate and vegetation of west Africa and Africa* (NTS 1a, 2b, 2c, 2e–2h and 3a–3q).

E.g.

i. Essential questions

Develop two essential questions to support the teacher’s delivery, and two essential questions for learners, encouraging critical thinking and discussion, etc.

ii. Differentiation

Create activities on relief, drainage, climate and vegetation of west Africa and Africa that cater for learners with varied learning abilities, including the visually impaired learner in the class, etc.

iii. Learning activities

Based on the learning indicator for Week 10 on relief, drainage, climate and vegetation of west Africa and Africa, develop appropriate learning activities to support all learners in the class, including those with different proficiency levels and the visually impaired learner. Include the resources required to deliver the lesson, etc.

iv. Assessment tasks

Provide two formative assessment tasks and two summative test items to meet the required DoK levels of the Week 10 in the Teacher Manual. Provide a rubric/mark scheme for each, etc.



Note

- i.** Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii.** Transfer the information from your SS App into your learning planner template to complete your plans.
- iii.** Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

Hint



Move to Activity 3.0

2.0B Reviewing the Learning Plan and Addressing challenges in planning, delivering and assessing lessons (50 minutes)

Purpose: To support teachers address challenges they may have during lesson preparation and delivery.

Learning Outcome (LO): To address specific concerns of teachers in planning, teaching and assessment.

Learning Indicator (LI) 1: Address challenges in the preparation and delivery of a lesson.

Learning Indicator (LI) 2: Enact an activity in preparation to teach the lesson.

- 2.1** Upload your completed learning plan into the subject specific App. Have a chat with your App to verify the following and discuss their suitability to reflect the diverse needs of learners in your class (NTS 1a, 2b, 2c and 3e–3q).

E.g.

Learning activities

Review the attached learning plan to assess whether the learning activities can be completed within 2 hours and if the teaching resources are appropriate for those activities. Offer suggestions for improvements, etc.

Hint



Continue chatting with your App to verify the following and use the responses to complete your plan

- a) essential questions
- b) differentiation
- c) assessment tasks, etc.



Note

- i. Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii. Transfer the information from your SS App into your learning planner template to complete your plans.
- iii. Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

2.2 Identify a challenging area or issue and chat with your subject specific App for steps on how to address it for effective lesson delivery (NTS 3j).

2.3 Share your experience with the group.

3.0 Enactment (25 minutes)

3.1 Enact a teaching activity in your plan (NTS 1b, 1f, 1g, 2c, 2e, 2f and 3c–3j).

3.2 Reflect on the activity enacted to improve lesson delivery (NTS 1a).

3.3 Ask for feedback on the activity enacted (NTS 1a, 1e, 2c and 3o).



Note

You may record the enacted activity.

4.0 Reflection (10 minutes)

4.1 Reflect and share your views on the session (NTS 1a, 1b).

4.2 Identify a colleague to observe your lesson in relation to PLC Session 10 to provide feedback on your lesson (NTS 1f, 1g).

4.3 Remember to:

- a.** Read PLC Session 11, Teacher Manual and related Learner Material (NTS 3a).
- b.** Bring along your laptop, Teacher Manual and PLC Handbook in preparation for the next session (NTS 3a).
- c.** Identify areas you find challenging in your teaching for discussion during the next session.

PLC Session 11: Manufacturing Industries in Ghana

1.0 Introduction (5 minutes)

- 1.1** Share one thing you applied in your classroom based on PLC Session 10
- the challenges you faced
 - how you addressed them
- 1.2** Have you developed your learning plan for Week 11?
- If you answered **yes**, conduct your PLC Session from Activity 2.0B
 - If you answered **no**, conduct your PLC Session from Activity 2.0A

Hint



You cannot conduct PLC on Activity 2.0B if you **have not** prepared your learning plan

2.0A Planning and Reviewing of Learning Plan (50 minutes)

Purpose: The purpose of this session is to populate the learning planner for Week 11 on *manufacturing industries in Ghana* using the subject specific App.

Learning Outcome (LO): To populate the learning planner with the essential questions, differentiation, learning activities and key assessments and use the subject specific App to review your populated learning plan (NTS 2b, 2c, 2e, 2f, 3a, 3d, 3e, 3g-3k and 3o).

Learning Indicator (LI) 1: Populate the learning planner using the subject specific App

Learning Indicator (LI) 2: Enact an activity from your reviewed learning plan.

2.1 Refer to your Teacher Manual and have a chat with your subject specific App to develop your learning plan for Week 11 on manufacturing industries in Ghana (NTS 1a, 2b, 2c, 2e–2h and 3a–3q).

E.g.

i. Essential questions

Provided two essential questions on manufacturing industries in Ghana to guide the teacher’s delivery and one essential question to stimulate learners’ critical thinking and discussion, etc.

ii. Differentiation

Design all-inclusive activities to accommodate all learners with varying proficiency levels and the visually impaired student in the class, etc.

iii. Learning activities

Identify the learning indicator for Week 11 and recommend two-hour learning activities for that week’s lesson, accommodating learners with different proficiency levels and including national values. Include the resources required to deliver the lesson, etc.

iv. Assessment tasks

Provide the assessment mode for Week 11 on manufacturing industries in Ghana, and develop four formative assessment tasks and two summative assessment items to reflect the required DoK levels of the learning indicator, considering the diverse needs of all learners, etc.



Note

- i.** Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii.** Transfer the information from your SS App into your learning planner template to complete your plans.
- iii.** Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

Hint



Move to Activity 3.0

2.0B Reviewing the Learning Plan and Addressing Challenges in Planning, Delivering and Assessing Lessons (50 Minutes)

Purpose: To support teachers address challenges they may have during lesson preparation and delivery.

Learning Outcome (LO): To address specific concerns of teachers in planning, teaching and assessment.

Learning Indicator (LI) 1: Address challenges in the preparation and delivery of a lesson.

Learning Indicator (LI) 2: Enact an activity in preparation to teach the lesson.

- 2.1** Upload your completed learning plan into the subject specific App. Have a chat with your App to verify the following and discuss their suitability to reflect the diverse needs of learners in your class (NTS 1a, 2b, 2c and 3e–3q).

E.g.

Differentiation

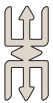
Referring to the uploaded plan, verify whether the differentiated activities cater for all the learning abilities of learners. Offer suggestions to improve them, etc.

Hint



Continue chatting with your App to verify the following and use the responses to complete your plan

- a) essential questions
- b) learning activities
- c) assessment tasks, etc.



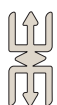
Note

- i. Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii. Transfer the information from your SS App into your learning planner template to complete your plans.
- iii. Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

- 2.2** Identify a challenging area or issue and chat with your subject specific App for steps on how to address it for effective lesson delivery (NTS 3j).
- 2.3** Share your experience with the group.

3.0 Enactment (25 minutes)

- 3.1** Enact a teaching activity in your plan (NTS 1b, 1f, 1g, 2c, 2e, 2f and 3c–3j).
- 3.2** Reflect on the activity enacted to improve lesson delivery (NTS 1a).
- 3.3** Ask for feedback on the activity enacted (NTS 1a, 1e, 2c and 3o).



Note

You may record the enacted activity.

4.0 Reflection (10 minutes)

- 4.1** Reflect and share your views on the session (NTS 1a, 1b).
- 4.2** Identify a colleague to observe your lesson in relation to PLC Session 11 to provide feedback on your lesson (NTS 1f, 1g).
- 4.3** Remember to:
 - a.** Read PLC Session 12, Teacher Manual and related Learner Material (NTS 3a).
 - b.** Bring along your laptop, Teacher Manual and PLC Handbook in preparation for the next session (NTS 3a).
 - c.** Identify areas you find challenging in your teaching for discussion during the next session.

PLC Session 12: Preparing for End of Semester Examination

1.0 Introduction (10 minutes)

- 1.1 Share one thing on the assessment in the PLC Session 11 that you
 - a. applied in your lesson delivery
 - b. found challenging and how you addressed it.
- 1.2 Share one challenge you encountered while populating your learning plan for Week 12 before the session that you would like to discuss during this PLC session.
- 1.3 Read and discuss the Purpose, Learning Outcome (LO) and Learning Indicators (LIs) for the session.

Purpose: The purpose of this session is to use the subject-specific App to

1. review the completed learning plan for Week 12
2. prepare assessment tasks and rubrics for the end of semester examination

Learning Outcome (LO): To review the learning plan for Week 12 and address any challenges in planning and developing assessment tasks for the end-of-semester examination (NTS 2b, 2c, 2e, 2f, 3a, 3d, 3e, 3g-3k and 3o).

Learning Indicator (LI) 1: Review the learning plan and address challenges in the preparation and delivery of a lesson.

Learning Indicator (LI) 2: Discuss, develop and review assessment tasks with rubrics for the end of semester examination.

2.0 Reviewing the Learning Plan (20 minutes)

- 2.1 Upload your learning plan into the subject-specific App. Have a chat with your App to verify the following and discuss their suitability to reflect the diverse needs of learners in your class (NTS 1a, 2b, 2c and 3e-3q).

E.g.

Differentiation

Refer to the uploaded learning plan and assess whether the differentiated strategies accommodate the diverse learning abilities. Review the activities and provide suggestions where suitable, etc.

Hint



Continue chatting with your App to verify the following and use the responses to complete your plan

- a) essential questions
- b) learning activities
- c) assessment tasks, etc.

3.0 Prepare for End of Semester Examination (50 minutes)

- 3.1** Refer to your Teacher Manual for the format of the end of semester examination and use the subject-specific App to review or develop your assessment tasks, mark schemes/rubrics, etc. (NTS 2a–2c, 2e–2h and 3j–3q).

E.g.

The end-of-semester assessment task should cover all indicators from weeks 1 to 11. Provide all indicators from weeks 1 to 11 along with their respective DoK levels.

Based on the indicators for weeks 1 to 11 and their respective recommended Dok levels prescribed in the Teacher Manual, provide a 3-hour examination following the structure:

1. 50 MCQs Distributed as follows: 30% Dok level 1, 40% Dok level 2, and 30% Dok level 3
2. One compulsory map-based question at DoK level 2 or 4
3. Three essay questions at DoK level 3

Provide rubrics and mark schemes for each of the tasks, etc.



Note

In preparing for mid-semester or end-of-semester examination, one prompt may not be enough for the App to provide all you need (DoK levels, structure, distribution across DoK levels, etc.)

- 3.2** Have a chat with your App to review the suggested assessment tasks and discuss the suitability of the responses from activity 3.1. Use the review to refine the responses to complete the set questions (NTS 1a, 2b, 2c and 3e–3q). In doing this activity, consider:

E.g.

- i. Whether the assessment tasks follow a 30%, 40%, 30% DoK distribution**

Check whether the assessment test items that you have suggested follow the 30:40:30 DoK distribution, whether the MCQs meet the criteria for writing MCQs, and whether the MCQs have good distractors. Provide recommendations, etc.

- ii. Mark scheme and score distribution**

Ensure the rubric or mark scheme align with the tasks and that the mark distribution is accurate.

- iii. Resources needed for assessment administration**

Suggest appropriate resources required for administering the assessment task, etc.

- iv. How to provide feedback**

Suggest methods for providing feedback to learners that cater for learners' strength and weaknesses, etc.



Note

Use the responses to complete your plan

4.0 Reflection (10 minutes)

- 4.1** Reflect and share your views on the session (NTS 1a, 1b).
- 4.2** Identify a colleague to observe your lesson in relation to PLC Session 12 to provide feedback on your lesson (NTS 1f, 1g).
- 4.3** Remember to:
- Mark, record and upload your learners' assessment scores in the Student Transcript Portal (NTS 3j, 3n).
 - Read PLC Session 13, Teacher Manual and related Learner Material (NTS 3a).
 - Bring along your laptop, Teacher Manual and PLC Handbook in preparation for the next session (NTS 3a).

- d.** Identify areas you found challenging in your planning and administering of the assessment for discussion during the next session.

PLC Session 13: Soils

1.0 Introduction (5 minutes)

- 1.1 Share one thing you applied in your classroom based on PLC Session 12
 - a. the challenges you faced
 - b. how you addressed them
- 1.2 Have you developed your learning plan for Week 13?
 - a. If you answered **yes**, conduct your PLC Session from Activity 2.0B
 - b. If you answered **no**, conduct your PLC Session from Activity 2.0A

Hint



You cannot conduct PLC on Activity 2.0B if you **have not** prepared your learning plan

2.0A Planning and Reviewing of Learning Plan (50 minutes)

Purpose: The purpose of this session is to populate the learning planner for Week 13 on *soils* using the subject specific App.

Learning Outcome (LO): To populate the learning planner with the essential questions, differentiation, learning activities and key assessments and use the subject specific App to review your populated learning plan (NTS 2b, 2c, 2e, 2f, 3a, 3d, 3e, 3g-3k and 3o).

Learning Indicator (LI) 1: Populate the learning planner using the subject specific App

Learning Indicator (LI) 2: Enact an activity from your reviewed learning plan.

- 2.1 Refer to your Teacher Manual and have a chat with your subject specific App to develop your learning plan for Week 13 on *soils* (NTS 1a, 2b, 2c, 2e-2h and 3a-3q).

E.g.

i. Essential questions

Provide two essential questions to assist the teacher's delivery, and one essential question to foster critical thinking and discussion among learners, etc.

ii. Differentiation

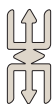
Design differentiated strategies to accommodate all learners with varying proficiency levels and the visually impaired student in the class, etc.

iii. Learning activities

Identify the learning indicator for Week 13 and suggest a set of five scaffolding learning activities for a class with different proficiency levels and one visually impaired learner. Include the resources needed to deliver the lesson, etc.

iv. Assessment tasks

Develop two formative assessment tasks and four summative assessment items to reflect the required DoK levels of the learning indicator, considering the diverse needs of all learners, etc.



Note

- i.** Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii.** Transfer the information from your SS App into your learning planner template to complete your plans.
- iii.** Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

Hint



Move to Activity 3.0

2.0B Reviewing the Learning Plan and Addressing Challenges in Planning, Delivering and Assessing Lessons (50 Minutes)

Purpose: To support teachers in addressing challenges they may have during lesson preparation and delivery.

Learning Outcome (LO): To address specific concerns of teachers in planning, teaching and assessment.

Learning Indicator (LI) 1: Address challenges in the preparation and delivery of a lesson.

Learning Indicator (LI) 2: Enact an activity in preparation to teach the lesson.

- 2.1** Upload your completed learning plan into the subject specific App. Please have a chat with your App to verify the following and discuss their suitability to reflect the diverse needs of learners in your class (NTS 1a, 2b, 2c and 3e–3q).

E.g.

Assessment tasks

Verify from uploaded learning plan to see whether the formative and summative assessment tasks are suitable for the lesson, etc.

Hint



Continue chatting with your App to verify the following and use the responses to complete your plan

- a) essential questions
- b) differentiation
- c) learning activities, etc.



Note

- i. Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii. Transfer the information from your SS App into your learning planner template to complete your plans.
- iii. Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

- 2.2** Identify a challenging area or issue and chat with your subject specific App for steps on how to address it for effective lesson delivery (NTS 3j).
- 2.3** Share your experience with the group.

3.0 Enactment (25 minutes)

- 3.1** Enact a teaching activity in your plan (NTS 1b, 1f, 1g, 2c, 2e, 2f and 3c–3j).
- 3.2** Reflect on the activity enacted to improve lesson delivery (NTS 1a).
- 3.3** Ask for feedback on the activity enacted (NTS 1a, 1e, 2c and 3o).



Note

You may record the enacted activity.

4.0 Reflection (10 minutes)

- 4.1** Reflect and share your views on the session (NTS 1a, 1b).
- 4.2** Identify a colleague to observe your lesson in relation to PLC Session 13 to provide feedback on your lesson (NTS 1f, 1g).
- 4.3** Remember to:
 - a.** Read PLC Session 14, Teacher Manual and related Learner Material (NTS 3a).
 - b.** Bring along your laptop, Teacher Manual and PLC Handbook in preparation for the next session (NTS 3a).
 - c.** Identify areas you find challenging in your teaching for discussion during the next session.

PLC Session 14: Preparing for Student Transcript Portal Assessment – Individual Project

1.0 Introduction (10 minutes)

- 1.1 Share one thing on the assessment in the PLC Session 13 that you
 - a. applied in your lesson delivery
 - b. found challenging and how you addressed it.
- 1.2 Share one challenge you encountered while populating your learning plan for Week 14 before the session that you would like to discuss during this PLC session.
- 1.3 Read and discuss the Purpose, Learning Outcome (LO) and Learning Indicators (LIs) for the session.

Purpose: The purpose of this session is to use the subject-specific App to

- 1. review the completed learning plan for Week 14
- 2. prepare assessment tasks and rubrics for the individual project.

Learning Outcome (LO): To review the learning plan for Week 14 and address any challenges in planning and developing assessment tasks for the individual project (NTS 2b, 2c, 2e, 2f, 3a, 3d, 3e, 3g–3k and 3o).

Learning Indicator (LI) 1: Review the learning plan and address challenges in the preparation and delivery of a lesson.

Learning Indicator (LI) 2: Discuss, develop and review assessment tasks with rubrics for the individual project.

2.0 Reviewing the Learning Plan (20 minutes)

- 2.1 Upload your completed learning plan into the subject-specific App. Please have a chat with your App to verify the following and discuss their suitability to reflect the diverse needs of learners in your class (NTS 1a, 2b, 2c and 3e–3q).

E.g.

Differentiation

Refer to the Week14 learning plan and assess whether the lesson is suitably differentiated to accommodate the learners' abilities. Offer suggestions for improvement, etc.

Hint

Continue chatting with your App to verify the following and use the responses to complete your plan

- a) essential questions
- b) learning activities
- c) assessment tasks, etc.

3.0 Prepare to Assign, Assess and Record for the Student Transcript Portal (50 minutes)

- 3.1** Refer to your Teacher Manual for the key assessment to be recorded in the Student Transcript Portal and have a chat with the subject-specific App to review or develop your assessment tasks and mark schemes/rubrics (NTS 2a–2c, 2e–2h and 3j–3q).

E.g.

Individual Project

The assessment task for this Week is an individual project. Refer to the Teacher Manual in Appendix E, section 5, and create a similar individual project assessment task. Suggest how the project can be assigned to learners and a scoring rubric, etc.



Note

- i. Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii. Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

- 3.2** Have a chat with your App to verify the suggested assessment tasks and discuss the suitability of the responses from activity 3.1. Use the suggestions to refine the assessment tasks (NTS 1a, 2b, 2c and 3e–3q). In doing this activity, consider:

E.g.

i. Task

Check if the individual project assessment task you have suggested can be completed within the weeks specified in the learning plan. Offer suggestions for improvement where necessary, etc.

ii. Mark scheme and score distribution

Review the rubrics and marks allocation where applicable to ensure accuracy, etc.

iii. Resources needed for assessment administration

Suggest the resources required for learners to undertake the project for the teacher to manage the project task, etc.

iv. How to provide feedback

Recommend a suitable method for giving feedback on the individual project taking account SEN, etc.



Note

Use the responses to complete your plan

4.0 Reflection (10 minutes)

4.1 Reflect and share your views on the session (NTS 1a, 1b).

4.2 Identify a colleague to observe your lesson in relation to PLC Session 14 to provide feedback on your lesson (NTS 1f, 1g).

4.3 Remember to:

- a.** Mark, record and upload your learners' assessment scores in the Student Transcript Portal (NTS 3j, 3n).
- b.** Read PLC Session 15, Teacher Manual and related Learner Material (NTS 3a).
- c.** Bring along your laptop, Teacher Manual and PLC Handbook in preparation for the next session (NTS 3a).
- d.** Identify areas you found challenging in your teaching and administration of the individual project assessment for discussion during the next session.

PLC Session 15: Elements of Climate

1.0 Introduction (5 minutes)

- 1.1 Share one thing you applied in your classroom based on PLC Session 14
 - a. the challenges you faced
 - b. how you addressed them
- 1.2 Have you developed your learning plan for Week 15?
 - a. If you answered **yes**, conduct your PLC Session from Activity 2.0B
 - b. If you answered **no**, conduct your PLC Session from Activity 2.0A

Hint



You cannot conduct PLC on Activity 2.0B if you **have not** prepared your learning plan

2.0A Planning and Reviewing of Learning Plan (50 minutes)

Purpose: The purpose of this session is to populate the learning planner for Week 15 on *elements of climate* using the subject specific App.

Learning Outcome (LO): To populate the learning planner with the essential questions, differentiation, learning activities and key assessments and use the subject specific App to review your populated learning plan (NTS 2b, 2c, 2e, 2f, 3a, 3d, 3e, 3g-3k and 3o).

Learning Indicator (LI) 1: Populate the learning planner using the subject specific App

Learning Indicator (LI) 2: Enact an activity from your reviewed learning plan.

- 2.1 Refer to your Teacher Manual and have a chat with your subject specific App to develop your learning plan for Week 15 on *elements of climate* (NTS 1a, 2b, 2c, 2e-2h and 3a-3q).

E.g.

i. Essential questions

Develop one essential question that guides the teacher's effective instructions, and two that guides learners' acquisition and analysis of knowledge on Elements of Climate.

ii. Differentiation

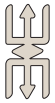
Provide strategies directed at supporting learners with diverse needs and abilities on Elements of Climate.

iii. Learning activities

Design suitable learning activities to support the lesson for two hours on Elements of Climate, considering different learning abilities and include GESI.

iv. Assessment tasks

Create two formative assessment tasks and four summative test items that align with the Dok level(s) recommended in the Week 15 of the Teacher Manual. Include a mark scheme or rubric for each task.



Note

- i. Chatting once may not be enough for the App to provide all that you may need for the tasks*
- ii. Transfer the information from your SS App into your learning planner template to complete your plans.*
- iii. Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.*

Hint



Move to Activity 3.0

2.0B Reviewing the Learning Plan and Addressing challenges in planning, delivering and assessing lessons (50 minutes)

Purpose: To support teachers in addressing challenges they may have during lesson preparation and delivery.

Learning Outcome (LO): To address specific concerns of teachers in planning, teaching and assessment.

Learning Indicator (LI) 1: Address challenges in the preparation and delivery of a lesson.

Learning Indicator (LI) 2: Enact an activity in preparation to teach the lesson.

- 2.1** Upload your completed learning plan into the subject specific App. Please have a chat with your App to verify the following and discuss their suitability to reflect the diverse needs of learners in your class (NTS 1a, 2b, 2c and 3e–3q).

E.g.

Assessment tasks

Refer to the uploaded learning plan and verify whether the assessment tasks are suitable for the lesson and whether they align with the DoK levels recommended in the Teacher Manual.

Hint



Continue chatting with your App to verify the following and use the responses to complete your plan

- a) learning questions
- b) differentiation
- c) learning activities, etc.



Note

- i. Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii. Transfer the information from your App into your learning planner template to complete your plans.
- iii. Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

- 2.2** Identify a challenging area or issue and chat with your subject specific App for steps on how to address it for effective lesson delivery (NTS 3j).
- 2.3** Share your experience with the group.

3.0 Enactment (25 minutes)

- 3.1** Enact a teaching activity in your plan (NTS 1b, 1f, 1g, 2c, 2e, 2f and 3c–3j).
- 3.2** Reflect on the activity enacted to improve lesson delivery (NTS 1a).
- 3.3** Ask for feedback on the activity enacted (NTS 1a, 1e, 2c and 3o).



Note

You may record the enacted activity.

4.0 Reflection (10 minutes)

- 4.1** Reflect and share your views on the session (NTS 1a, 1b).
- 4.2** Identify a colleague to observe your lesson in relation to PLC Session 15 to provide feedback on your lesson (NTS 1f, 1g).
- 4.3** Remember to:
 - a.** Read PLC Session 16, Teacher Manual and related Learner Material (NTS 3a).
 - b.** Bring along your laptop, Teacher Manual and PLC Handbook in preparation for the next session (NTS 3a).
 - c.** Identify areas you find challenging in your teaching for discussion during the next session.

PLC Session 16: Forms of Precipitation

1.0 Introduction (5 minutes)

- 1.1 Share one thing you applied in your classroom based on PLC Session 15
 - a. the challenges you faced
 - b. how you addressed them
- 1.2 Have you developed your learning plan for Week 16?
 - a. If you answered **yes**, conduct your PLC Session from Activity 2.0B
 - b. If you answered **no**, conduct your PLC Session from Activity 2.0A

Hint



You cannot conduct PLC on Activity 2.0B if you **have not** prepared your learning plan.

2.0A Planning and Reviewing of Learning Plan (50 minutes)

Purpose: The purpose of this session is to populate the learning planner for Week 16 on *forms of precipitation* using the subject-specific App.

Learning Outcome (LO): To populate the learning planner with the essential questions, differentiation, learning activities and key assessments and use the subject specific App to review your populated learning plan (NTS 2b, 2c, 2e, 2f, 3a, 3d, 3e, 3g-3k and 3o).

Learning Indicator (LI) 1: Populate the learning planner using the subject specific App

Learning Indicator (LI) 2: Enactment an activity from your reviewed learning plan.

- 2.1 Refer to your Teacher Manual and have a chat with your subject specific App to develop your learning plan for Week 16 on *forms of precipitation* (NTS 1a, 2b, 2c, 2e-2h and 3a-3q).

E.g.

i. Essential questions

Suggest three essential questions to guide the lesson on Forms of Precipitation. Two should assist the teacher's delivery, and one should be aimed at learners to foster thought and discussion, etc.

ii. Learning activities

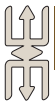
Identify the learning indicator for Week 1 and plan a two-hour learning activity for that week's lesson for a class of 40 learners with different proficiency levels and one visually impaired learner. Include the resources needed to deliver the lesson at Garu SHS, Northern Ghana.

iii. Differentiation

Suggest suitable differentiation strategies to ensure all learners are actively engaged and supported throughout the lesson on Forms of Precipitation, etc.

iv. Assessment tasks

Develop two formative assessments tasks and two summative assessments on Forms of Precipitation to the required DoK level in the Teacher Manual, etc.



Note

- i.** Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii.** Transfer the information from your SS App into your learning planner template to complete your plans.
- iii.** Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

Hint



Move to Activity 3.0

2.0B Reviewing the Learning Plan and Addressing challenges in planning, delivering and assessing lessons (50 minutes)

Purpose: To support teachers in addressing challenges they may have during lesson preparation and delivery.

Learning Outcome (LO): To address specific concerns of teachers in planning, teaching and assessment.

Learning Indicator (LI) 1: Address challenges in the preparation and delivery of a lesson.

Learning Indicator (LI) 2: Enact an activity in preparation to teach the lesson.

- 2.1** Upload your completed learning plan into the subject specific App. Please have a chat with your App to verify the following and discuss their suitability to reflect the diverse needs of learners in your class (NTS 1a, 2b, 2c and 3e–3q).

E.g.

Assessment tasks

Attached is the learning plan for Week 16. Verify whether the assessment tasks align with the Dok levels as specified in the Teacher Manual and include any suggestions for improvement.

Hint



Continue chatting with your App to verify the following and use the responses to complete your plan

- a) essential questions
- b) differentiation
- c) learning task, etc.



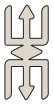
Note

- i. Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii. Transfer the information from your App into your learning planner template to complete your plans.
- iii. Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

- 2.2** Identify a challenging area or issue and chat with your subject specific App for steps on how to address it for effective lesson delivery (NTS 3j).
- 2.3** Share your experience with the group.

3.0 Enactment (25 minutes)

- 3.1** Enact a teaching activity in your plan (NTS 1b, 1f, 1g, 2c, 2e, 2f and 3c–3j).
- 3.2** Reflect on the activity enacted to improve lesson delivery (NTS 1a).
- 3.3** Ask for feedback on the activity enacted (NTS 1a, 1e, 2c and 3o).



Note

You may record the enacted activity.

4.0 Reflection (10 minutes)

- 4.1** Reflect and share your views on the session (NTS 1a, 1b).
- 4.2** Identify a colleague to observe your lesson in relation to PLC Session 16 to provide feedback on your lesson (NTS 1f, 1g).
- 4.3** Remember to:
 - a.** Read PLC Session 17, Teacher Manual and related Learner Material (NTS 3a).
 - b.** Bring along your laptop, Teacher Manual and PLC Handbook in preparation for the next session (NTS 3a).
 - c.** Identify areas you find challenging in your teaching for discussion during the next session.

PLC Session 17: World Climatic Zones and the Associated Vegetation

1.0 Introduction (5 minutes)

- 1.1 Share one thing you applied in your classroom based on PLC Session 16
 - a. the challenges you faced
 - b. how you addressed them
- 1.2 Have you developed your learning plan for Week 17?
 - a. If you answered **yes**, conduct your PLC Session from Activity 2.0B
 - b. If you answered **no**, conduct your PLC Session from Activity 2.0A

Hint



You cannot conduct PLC on Activity 2.0B if you **have not** prepared your learning plan

2.0A Planning and Reviewing of Learning Plan (50 minutes)

Purpose: The purpose of this session is to populate the learning planner for Week 17 on *world climatic zones and the associated vegetation* using the subject specific App.

Learning Outcome (LO): To populate the learning planner with the essential questions, differentiation, learning activities and key assessments and use the subject specific App to review your populated learning plan (NTS 2b, 2c, 2e, 2f, 3a, 3d, 3e, 3g-3k and 3o).

Learning Indicator (LI) 1: Populate the learning planner using the subject specific App

Learning Indicator (LI) 2: Enact an activity from your reviewed learning plan.

- 2.1** Refer to your Teacher Manual and have a chat with your subject specific App to develop your learning plan for Week 17 on *world climatic zones and the associated vegetation* (NTS 1a, 2b, 2c, 2e–2h and 3a–3q).

E.g.

i. Essential questions

The lesson for Week 1 is on the world climatic zones and the associated vegetation. Develop two essential questions to support the teacher's delivery, and one essential question to guide learners' critical thinking and discussion, etc.

ii. Differentiation

Design activities that accommodate all learners with varying proficiency levels and the visually impaired student in teaching world climatic zones and the associated vegetation, etc.

iii. Learning activities

Based on the learning indicator for Week 17 in the Teacher Manual, suggest GESI-responsive learning activities for a two-hour lesson to 40 learners with different proficiency levels and one visually impaired learner. Include the resources needed to deliver the lesson at Garu SHS, Northern Ghana, etc.

iv. Assessment tasks

In line with the assessment mode for Week 17 in the Teacher Manual, develop two formative assessment tasks and four summative assessment items to reflect the required DoK levels recommended for the learning indicator, considering the diverse needs of all learners, etc.



Note

- i.** Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii.** Transfer the information from your SS App into your learning planner template to complete your plans.
- iii.** Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

Hint

Move to Activity 3.0



2.0B Reviewing the Learning Plan and Addressing challenges in planning, delivering and assessing lessons (50 minutes)

Purpose: To support teachers in addressing challenges they may have during lesson preparation and delivery.

Learning Outcome (LO): To address specific concerns of teachers in planning, teaching and assessment.

Learning Indicator (LI) 1: Address challenges in the preparation and delivery of a lesson.

Learning Indicator (LI) 2: Enact an activity in preparation to teach the lesson.

- 2.1** Upload your completed learning plan into the subject specific App. Please have a chat with your App to verify the following and discuss their suitability to reflect the diverse needs of learners in your class (NTS 1a, 2b, 2c and 3e–3q).

E.g.

Differentiation

Refer to the uploaded learning plan and assess whether the differentiation activities are differentiated to meet the diverse learners' needs. Offer suggestions for improvement, etc.

Hint



Continue chatting with your App to verify the following and use the responses to complete your plan

- a) essential questions
- b) learning activities
- c) assessment tasks, etc.



Note

- i. Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii. **Transfer the information from your SS App into your learning planner template to complete your plans.**
- iii. Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

2.2 Identify a challenging area or issue and chat with your subject specific App for steps on how to address it for effective lesson delivery (NTS 3j).

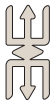
2.3 Share your experience with the group.

3.0 Enactment (25 minutes)

3.1 Enact a teaching activity in your plan (NTS 1b, 1f, 1g, 2c, 2e, 2f and 3c–3j).

3.2 Reflect on the activity enacted to improve lesson delivery (NTS 1a).

3.3 Ask for feedback on the activity enacted (NTS 1a, 1e, 2c and 3o).



Note

You may record the enacted activity.

4.0 Reflection (10 minutes)

4.1 Reflect and share your views on the session (NTS 1a, 1b).

4.2 Identify a colleague to observe your lesson in relation to PLC Session 17 to provide feedback on your lesson (NTS 1f, 1g).

4.3 Remember to:

- a.** Read PLC Session 18, Teacher Manual and related Learner Material (NTS 3a).
- b.** Bring along your laptop, Teacher Manual and PLC Handbook in preparation for the next session (NTS 3a).
- c.** Identify areas you find challenging in your teaching for discussion during the next session.

PLC Session 18: Preparing for Mid-Semester Examination

1.0 Introduction (10 minutes)

- 1.1 Share one thing on assessment in PLC Session 17 that you
 - a. applied in your lesson delivery
 - b. found challenging and how you addressed it.
- 1.2 Share one challenge you encountered while populating your learning plan for Week 18 before the session that you would like to discuss during this PLC session.
- 1.3 Read and discuss the Purpose, Learning Outcome (LO) and Learning Indicators (LIs) for the session.

Purpose: The purpose of this session is to use the subject specific App to

1. review the completed learning plan for Week18
2. prepare assessment tasks and rubrics for mid-semester examination

Learning Outcome (LO): To review the learning plan for Week18 and address any challenges in planning and developing assessment tasks for the mid-semester examination (NTS 2b, 2c, 2e, 2f, 3a, 3d, 3e, 3g-3k and 3o).

Learning Indicator (LI) 1: Review the learning plan and address challenges in the preparation and delivery of a lesson.

Learning Indicator (LI) 2: Discuss, develop and review assessment tasks with rubrics for the mid-semester examination.

2.0 Reviewing the Learning Plan (20 minutes)

- 2.1 Upload your learning plan into the subject-specific App. Have a chat with your App to verify the following and discuss their suitability to reflect the diverse needs of learners in your class (NTS 1a, 2b, 2c and 3e-3q).

E.g.

Essential questions

Use the uploaded learning plan to verify whether the essential questions are suitable to support the lesson. Make recommendations for improvement, etc.

Hint



Continue chatting with your App to verify the following and use the responses to complete your plan

- a) Learning activities
- b) differentiation
- c) assessment tasks, etc.

3.0 Prepare for mid-Semester Examination (50 minutes)

- 3.1** Refer to your Teacher Manual for the format of the mid-semester examination and use the subject specific App to review or develop your assessment tasks, mark schemes/rubrics, etc. (NTS 2a–2c, 2e–2h and 3j–3q).

E.g.

The mid-semester assessment task for the second semester to be done in 2 hours, should cover all indicators from weeks 13 to 17. Based on the recommended indicators and their respective DoK levels, provide:

1. 30 MCQs, eight fill-in/Supply questions, and two definition questions distributed as follows: 30% Dok level 1, 40% Dok level 2, and 30% Dok level 3
2. One compulsory map-based question at DoK level 3 or 4
3. Two essay questions at DoK level 3

Provide rubrics/mark schemes for each of the tasks, etc



Note

Use the responses to complete your plan

- 3.2** Have a chat with your App to review the suggested assessment tasks and discuss the suitability of the responses from activity 3.1. Use the review to refine the responses to complete the set questions (NTS 1a, 2b, 2c and 3e–3q). In doing this activity, consider:

E.g.

i. Whether the assessment tasks generated follow a 30%, 40%, 30% DoK distribution

Check if the assessment test items adhere to the 30:40:30 DoK distribution and whether the MCQs meet the criteria for writing MCQs. Provide suggestions for improvements, etc.

ii. Mark scheme and score distribution

Check whether the marking scheme corresponds to the question and whether the marks distribution is accurate. Make recommendations for improvement, etc.

iii. Resources needed for assessment administration

Suggest appropriate material resources required for the administration of the assessment, considering a duration of 2 hours.

iv. How to provide feedback

Suggest ways to provide constructive feedback on the assessment task. Include the mode of feedback for all learners. Make recommendations to improve subsequent teachings, etc.



Note

Use the responses to complete your plan

4.0 Reflection (10 minutes)

4.1 Reflect and share your views on the session (NTS 1a, 1b).

4.2 Identify a colleague to observe your lesson in relation to PLC Session 18 to provide feedback on your lesson (NTS 1f, 1g).

4.3 Remember to:

- a.** Mark, record and upload your learners' assessment scores in the Student Transcript Portal (NTS 3j, 3n).
- b.** Read PLC Session 19, Teacher Manual and related Learner Material (NTS 3a).
- c.** Bring along your Teacher Manual and PLC Handbook in preparation for the next session (NTS 3a).
- d.** Identify areas you found challenging in your planning and administering of the assessment for discussion during the next session.

PLC Session 19: Collection and Mapping of Geospatial Data

1.0 Introduction (5 minutes)

- 1.1 Share one thing you applied in your classroom based on PLC Session 18
 - a. the challenges you faced
 - b. how you addressed them
- 1.2 Have you developed your learning plan for Week 19?
 - a. If you answered **yes**, conduct your PLC Session from Activity 2.0B
 - b. If you answered **no**, conduct your PLC Session from Activity 2.0A

Hint



You cannot conduct PLC on Activity 2.0B if you **have not** prepared your learning plan

2.0A Planning and Reviewing of Learning Plan (50 minutes)

Purpose: The purpose of this session is to populate the learning planner for Week 19 on *the collection and mapping of geospatial data* using the subject specific App.

Learning Outcome (LO): To populate the learning planner with the essential questions, differentiation, learning activities and key assessments and use the subject specific App to review your populated learning plan (NTS 2b, 2c, 2e, 2f, 3a, 3d, 3e, 3g-3k and 3o).

Learning Indicator (LI) 1: Populate the learning planner using the subject specific App

Learning Indicator (LI) 2: Enact an activity from your reviewed learning plan.

2.1 Refer to your Teacher Manual and have a chat with your subject specific App to develop your learning plan for Week 19 on the *collection and mapping of geospatial data* (NTS 1a, 2b, 2c, 2e–2h and 3a–3q).

E.g.

i. Essential questions

Develop two essential questions to support the teacher’s delivery, and one essential question for learners’ critical thinking and comprehension, etc.

ii. Differentiation

Design differentiated activities to accommodate all learners with varying proficiency levels and one visually impaired student in the class, etc.

iii. Learning activities

With reference to the learning indicator for Week 19, suggest two-hour experiential learning activities for a class of 40 learners with different proficiency levels and one visually impaired learner. Include the resources needed to deliver the lesson at Garu SHS, Northern Ghana, etc.

iv. Assessment tasks

Provide the assessment mode for Week 19 and develop two formative assessment tasks and four summative assessment items to reflect the required DoK levels of the learning indicator, considering the diverse needs of all learners.



Note

- i.** Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii.** Transfer the information from your SS App into your learning planner template to complete your plans.
- iii.** Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

Hint



Move to Activity 3.0

2.0B Reviewing the Learning Plan and Addressing challenges in planning, delivering and assessing lessons (50 minutes)

Purpose: To support teachers in addressing challenges they may have during lesson preparation and delivery.

Learning Outcome (LO): To address specific concerns of teachers in planning, teaching and assessment.

Learning Indicator (LI) 1: Address challenges in the preparation and delivery of a lesson.

Learning Indicator (LI) 2: Enact an activity in preparation to teach the lesson.

- 2.1** Upload your completed learning plan into the subject specific App. Please have a chat with your App to verify the following and discuss their suitability to reflect the diverse needs of learners in your class (NTS 1a, 2b, 2c and 3e–3q).

E.g.

Essential questions

Review the attached plan and determine whether the essential questions encourage critical thinking and real-world application. Offer suggestions for improvement, etc.

Hint



Continue chatting with your App to verify the following and use the responses to complete your plan

- a) learning activities
- b) differentiation
- c) assessment tasks, etc.



Note

- i. Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii. **Transfer the information from your SS App into your learning planner template to complete your plans.**
- iii. Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

- 2.2** Identify a challenging area or issue and chat with your subject specific App for steps on how to address it for effective lesson delivery (NTS 3j).
- 2.3** Share your experience with the group.

3.0 Enactment (25 minutes)

- 3.1** Enact a teaching activity in your plan (NTS 1b, 1f, 1g, 2c, 2e, 2f and 3c–3j).
- 3.2** Reflect on the activity enacted to improve lesson delivery (NTS 1a).
- 3.3** Ask for feedback on the activity enacted (NTS 1a, 1e, 2c and 3o).



Note

You may record the enacted activity.

4.0 Reflection (10 minutes)

- 4.1** Reflect and share your views on the session (NTS 1a, 1b).
- 4.2** Identify a colleague to observe your lesson in relation to PLC Session 19 to provide feedback on your lesson (NTS 1f, 1g).
- 4.3** Remember to:
 - a.** Read PLC Session 20, Teacher Manual and related Learner Material (NTS 3a).
 - b.** Bring along your laptop, Teacher Manual and PLC Handbook in preparation for the next session (NTS 3a).
 - c.** Identify areas you find challenging in your teaching for discussion during the next session.

PLC Session 20: Emerging Technologies for Geospatial Data Collection

1.0 Introduction (5 minutes)

- 1.1 Share one thing you applied in your classroom based on PLC Session 19
 - a. the challenges you faced
 - b. how you addressed them
- 1.2 Have you developed your learning plan for Week 20?
 - a. If you answered **yes**, conduct your PLC Session from Activity 2.0B
 - b. If you answered **no**, conduct your PLC Session from Activity 2.0A

Hint



You cannot conduct PLC on Activity 2.0B if you **have not** prepared your learning plan

2.0A Planning and Reviewing of Learning Plan (50 minutes)

Purpose: The purpose of this session is to populate the learning planner for Week 20 on *emerging technologies for geospatial data collection* using the subject specific App.

Learning Outcome (LO): To populate the learning planner with the essential questions, differentiation, learning activities and key assessments and use the subject specific App to review your populated learning plan (NTS 2b, 2c, 2e, 2f, 3a, 3d, 3e, 3g-3k and 3o).

Learning Indicator (LI) 1: Populate the learning planner using the subject specific App

Learning Indicator (LI) 2: Enact an activity from your reviewed learning plan.

2.1 Refer to your Teacher Manual and have a chat with your subject specific App to develop your learning plan for Week 20 on *emerging technologies for geospatial data collection* (NTS 1a, 2b, 2c, 2e–2h and 3a–3q).

E.g.

i. Essential questions

Develop two essential questions on emerging technologies for geospatial data collection to support the teacher's delivery and two to encourage learners' critical thinking and discussion, etc.

ii. Differentiation

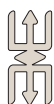
Design differentiated activities on emerging technologies for geospatial data collection to accommodate all 45 learners with varying proficiency levels and the visually impaired student in the class, etc.

iii. Learning activities

Based on the learning indicator for Week 20 on emerging technologies for geospatial data collection, provide two-hour learning activities for 45 learners with different proficiency levels and one visually impaired learner. Include the resources needed to deliver the lesson

iv. Assessment tasks

Verify the assessment mode for Week 20 in the Teacher Manual and develop two formative assessment tasks and four summative assessment items that reflect the recommended DoK levels, considering the diverse needs of all learners.



Note

- i.** Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii.** Transfer the information from your SS App into your learning planner template to complete your plans.
- iii.** Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

Hint

Move to Activity 3.0



2.0B Reviewing the Learning Plan and Addressing Challenges in Planning, Delivering and Assessing Lessons (50 Minutes)

Purpose: To support teachers in addressing challenges they may have during lesson preparation and delivery.

Learning Outcome (LO): To address specific concerns of teachers in planning, teaching and assessment.

Learning Indicator (LI) 1: Address challenges in the preparation and delivery of a lesson.

Learning Indicator (LI) 2: Enact an activity in preparation to teach the lesson.

- 2.1** Upload your completed learning plan into the subject specific App. Please have a chat with your App to verify the following and discuss their suitability to reflect the diverse needs of learners in your class (NTS 1a, 2b, 2c and 3e–3q).

E.g.

Differentiation

Refer to the uploaded learning plan for Week 20 and assess whether the differentiated activities are well-designed to meet the needs of 45 learners with diverse learning abilities. Suggest improvements where necessary, etc.

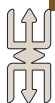
Hint



Continue chatting with your App to verify the following and use the responses to complete your plan

- a) essential questions
- b) learning activities
- c) assessment tasks, etc.

Note



- i. Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii. Transfer the information from your SS App into your learning planner template to complete your plans.
- iii. Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

- 2.2** Identify a challenging area or issue and chat with your subject specific App for steps on how to address it for effective lesson delivery (NTS 3j).
- 2.3** Share your experience with the group.

3.0 Enactment (25 minutes)

- 3.1** Enact a teaching activity in your plan (NTS 1b, 1f, 1g, 2c, 2e, 2f and 3c–3j).
- 3.2** Reflect on the activity enacted to improve lesson delivery (NTS 1a).
- 3.3** Ask for feedback on the activity enacted (NTS 1a, 1e, 2c and 3o).



Note

You may record the enacted activity.

4.0 Reflection (10 minutes)

- 4.1** Reflect and share your views on the session (NTS 1a, 1b).
- 4.2** Identify a colleague to observe your lesson in relation to PLC Session 20 to provide feedback on your lesson (NTS 1f, 1g).
- 4.3** Remember to:
 - a.** Read PLC Session 21, Teacher Manual and related Learner Material (NTS 3a).
 - b.** Bring along your laptop, Teacher Manual and PLC Handbook in preparation for the next session (NTS 3a).
 - c.** Identify areas you find challenging in your teaching for discussion during the next session.

PLC Session 21: Land Degradation in Ghana

1.0 Introduction (5 minutes)

- 1.1 Share one thing you applied in your classroom based on PLC Session 20
 - a. the challenges you faced
 - b. how you addressed them
- 1.2 Have you developed your learning plan for Week 21?
 - a. If you answered **yes**, conduct your PLC Session from Activity 2.0B
 - b. If you answered **no**, conduct your PLC Session from Activity 2.0A

Hint



You cannot conduct PLC on Activity 2.0B if you **have not** prepared your learning plan

2.0A Planning and Reviewing of Learning Plan (50 minutes)

Purpose: The purpose of this session is to populate the learning planner for Week 21 on *land degradation in Ghana* using the subject specific App.

Learning Outcome (LO): To populate the learning planner with the essential questions, differentiation, learning activities and key assessments and use the subject specific App to review your populated learning plan (NTS 2b, 2c, 2e, 2f, 3a, 3d, 3e, 3g-3k and 3o).

Learning Indicator (LI) 1: Populate the learning planner using the subject specific App

Learning Indicator (LI) 2: Enact an activity from your reviewed learning plan.

2.1 Refer to your Teacher Manual and have a chat with your subject specific App to develop your learning plan for Week 21 on *land degradation in Ghana* (NTS 1a, 2b, 2c, 2e–2h and 3a–3q).

E.g.

i. Essential questions

Provide two essential questions to guide the teacher's delivery, and two essential questions that focus on learners' comprehension and analytic skills on land degradation in Ghana, etc.

ii. Differentiation

Suggest how strategies that caters for diverse learning styles and abilities can be integrated into the lesson on land degradation in Ghana for Week 21, etc.

iii. Learning activities

Identify the learning indicator for Week 21 and propose two hours learning activities for a class of 40 learners with different proficiency levels and one visually impaired learner. Include the resources needed to deliver the lesson at New Juaben SHS, etc.

iv. Assessment tasks

Based on the recommended assessment mode for Week 21, develop two formative assessment tasks and four summative assessment items to reflect the required DoK levels of the learning indicator, etc.



Note

- i.** Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii.** Transfer the information from your SS App into your learning planner template to complete your plans.
- iii.** Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

Hint



Move to Activity 3.0

2.0B Reviewing the Learning Plan and Addressing Challenges in Planning, Delivering and Assessing Lessons (50 Minutes)

Purpose: To support teachers in addressing challenges they may have during lesson preparation and delivery.

Learning Outcome (LO): To address specific concerns of teachers in planning, teaching and assessment.

Learning Indicator (LI) 1: Address challenges in the preparation and delivery of a lesson.

Learning Indicator (LI) 2: Enact an activity in preparation to teach the lesson.

- 2.1** Upload your completed learning plan into the subject specific App. Please have a chat with your App to verify the following and discuss their suitability to reflect the diverse needs of learners in your class (NTS 1a, 2b, 2c and 3e–3q).

E.g.

Learning activities

Attached is the learning plan for Week 21. Check whether the learning activities cater for learners with different learning abilities in the class and appropriately directed towards the achievement of the essential questions, etc.

Hint

Continue chatting with your App to verify the following and use the responses to complete your plan

- a) essential questions
- b) differentiation
- c) assessment tasks, etc.



Note

- i. Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii. Transfer the information from your SS App into your learning planner template to complete your plans.
- iii. Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

- 2.2** Identify a challenging area or issue and chat with your subject specific App for steps on how to address it for effective lesson delivery (NTS 3j).
- 2.3** Share your experience with the group.

3.0 Enactment (25 minutes)

- 3.1** Enact a teaching activity in your plan (NTS 1b, 1f, 1g, 2c, 2e, 2f and 3c–3j).
- 3.2** Reflect on the activity enacted to improve lesson delivery (NTS 1a).
- 3.3** Ask for feedback on the activity enacted (NTS 1a, 1e, 2c and 3o).



Note

You may record the enacted activity.

4.0 Reflection (10 minutes)

- 4.1** Reflect and share your views on the session (NTS 1a, 1b).
- 4.2** Identify a colleague to observe your lesson in relation to PLC Session 21 to provide feedback on your lesson (NTS 1f, 1g).
- 4.3** Remember to:
 - a.** Read PLC Session 22, Teacher Manual and related Learner Material (NTS 3a).
 - b.** Bring along your laptop, Teacher Manual and PLC Handbook in preparation for the next session (NTS 3a).
 - c.** Identify areas you find challenging in your teaching for discussion during the next session.

PLC Session 22: Soil Pollution in Ghana

1.0 Introduction (5 minutes)

- 1.1 Share one thing you applied in your classroom based on PLC Session 21
 - a. the challenges you faced
 - b. how you addressed them
- 1.2 Have you developed your learning plan for Week 22?
 - a. If you answered **yes**, conduct your PLC Session from Activity 2.0B
 - b. If you answered **no**, conduct your PLC Session from Activity 2.0A

Hint



You cannot conduct PLC on Activity 2.0B if you **have not** prepared your learning plan

2.0A Planning and Reviewing of Learning Plan (50 minutes)

Purpose: The purpose for this session is to populate the learning planner for Week 22 on *soil pollution in Ghana* using the subject specific App.

Learning Outcome (LO): To populate the learning planner with the essential questions, differentiation, learning activities and key assessments and use the subject specific App to review your populated learning plan (NTS 2b, 2c, 2e, 2f, 3a, 3d, 3e, 3g-3k and 3o).

Learning Indicator (LI) 1: Populate the learning planner using the subject specific App

Learning Indicator (LI) 2: Enact an activity from your reviewed learning plan.

- 2.1 Refer to your Teacher Manual and have a chat with your subject specific App to develop your learning plan for Week 22 on *soil pollution in Ghana* (NTS 1a, 2b, 2c, 2e-2h and 3a-3q).

E.g.

i. Essential questions

Develop two essential questions on soil pollution in Ghana to support the teacher's instructions and one essential question to guide learners to achieve critical thinking and creativity.

ii. Learning activities

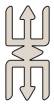
Identify the learning indicator for Week 22 and plan a two-hour GESI-responsive learning activity for learners with different proficiency levels and one visually impaired learner. Include the resources needed to deliver the lesson at Dambai SHS, etc.

iii. Differentiation

Design differentiated activities to accommodate all learners with varying proficiency levels and the visually impaired student in the class, etc.

iv. Assessment tasks

Based on the assessment mode for Week 22 in the Teacher Manual on soil pollution in Ghana, develop two formative assessment tasks for engaging learners and four summative assessment items to reflect the required DoK levels of the learning indicator, considering the diverse needs of all learners, etc.



Note

- i. Chatting once may not be enough for the App to provide all that you may need for the tasks*
- ii. Transfer the information from your SS App into your learning planner template to complete your plans.*
- iii. Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.*

Hint



Move to Activity 3.0

2.0B Reviewing the Learning Plan and Addressing Challenges in Planning, Delivering and Assessing Lessons (50 Minutes)

Purpose: To support teachers in addressing challenges they may have during lesson preparation and delivery.

Learning Outcome (LO): To address specific concerns of teachers in planning, teaching and assessment.

Learning Indicator (LI) 1: Address challenges in the preparation and delivery of a lesson.

Learning Indicator (LI) 2: Enact an activity in preparation to teach the lesson.

- 2.1** Upload your completed learning plan into the subject specific App. Please have a chat with your App to verify the following and discuss their suitability to reflect the diverse needs of learners in your class (NTS 1a, 2b, 2c and 3e–3q).

E.g.

Essential questions

Review the attached learning plan to see whether the essential questions appropriately direct teacher' delivery and encourage critical thinking and real-world application. Offer suggestions for improvement, etc.

Hint



Continue chatting with your App to verify the following and use the responses to complete your plan

- a) learning activities
- b) differentiation
- c) assessment tasks, etc.



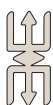
Note

- i. Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii. Transfer the information from your App into your learning planner template to complete your plans.
- iii. Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

- 2.2** Identify a challenging area or issue and chat with your subject specific App for steps on how to address it for effective lesson delivery (NTS 3j).
- 2.3** Share your experience with the group.

3.0 Enactment (25 minutes)

- 3.1** Enact a teaching activity in your plan (NTS 1b, 1f, 1g, 2c, 2e, 2f and 3c–3j).
- 3.2** Reflect on the activity enacted to improve lesson delivery (NTS 1a).
- 3.3** Ask for feedback on the activity enacted (NTS 1a, 1e, 2c and 3o).



Note

You may record the enacted activity.

4.0 Reflection (10 minutes)

- 4.1** Reflect and share your views on the session (NTS 1a, 1b).
- 4.2** Identify a colleague to observe your lesson in relation to PLC Session 22 to provide feedback on your lesson (NTS 1f, 1g).
- 4.3** Remember to:
 - a.** Read PLC Session 23, Teacher Manual and related Learner Material (NTS 3a).
 - b.** Bring along your laptop, Teacher Manual and PLC Handbook in preparation for the next session (NTS 3a).
 - c.** Identify areas you find challenging in your teaching for discussion during the next session.

PLC Session 23: Floods in Ghana

1.0 Introduction (5 minutes)

- 1.1 Share one thing you applied in your classroom based on PLC Session 22.
 - a. the challenges you faced
 - b. how you addressed them
- 1.2 Have you developed your learning plan for Week 23?
 - a. If you answered **yes**, conduct your PLC Session from Activity 2.0B
 - b. If you answered **no**, conduct your PLC Session from Activity 2.0A

Hint



You cannot conduct PLC on Activity 2.0B if you **have not** prepared your learning plan

2.0A Planning and Reviewing of Learning Plan (50 minutes)

Purpose: The purpose of this session is to populate the learning planner for Week 23 on *floods in Ghana* using the subject specific App.

Learning Outcome (LO): To populate the learning planner with the essential questions, differentiation, learning activities and key assessments and use the subject specific App to review your populated learning plan (NTS 2b, 2c, 2e, 2f, 3a, 3d, 3e, 3g-3k and 3o).

Learning Indicator (LI) 1: Populate the learning planner using the subject specific App

Learning Indicator (LI) 2: Enact an activity from your reviewed learning plan.

- 2.1 Refer to your Teacher Manual and have a chat with your subject specific App to develop your learning plan for Week 23 on *floods in Ghana* (NTS 1a, 2b, 2c, 2e-2h and 3a-3q).

E.g.

i. Essential questions

The lesson for Week 23 focuses on floods in Ghana. Develop two key questions to assist the teacher's delivery, and one key question for learners to foster critical thinking and discussion, etc.

ii. Differentiation

Design differentiated activities to accommodate all learners with varying proficiency levels and the visually impaired student in the class, etc.

iii. Learning activities

Identify the learning indicator for Week 23 and design a two-hour learning activity for that week's lesson, considering a class with learners at different proficiency levels and one visually impaired learner. Include the necessary resources to deliver the session, etc.

iv. Assessment tasks

Provide the assessment mode for Week 23 and develop two formative assessment tasks and four summative assessment items that reflect the required DoK levels of the learning indicator, taking into account the diverse needs of all learners, etc.



Note

- i.** Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii.** Transfer the information from your SS App into your learning planner template to complete your plans.
- iii.** Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

Hint



Move to Activity 3.0

2.0B Reviewing the Learning Plan and Addressing challenges in planning, delivering and assessing lessons (50 minutes)

Purpose: To support teachers, address challenges they may have during lesson preparation and delivery.

Learning Outcome (LO): To address specific concerns of teachers in planning, teaching and assessment.

Learning Indicator (LI) 1: Address challenges in the preparation and delivery of a lesson.

Learning Indicator (LI) 2: Enact an activity in preparation to teach the lesson.

- 2.1** Upload your completed learning plan into the subject specific App. Please have a chat with your App to verify the following and discuss their suitability to reflect the diverse needs of learners in your class (NTS 1a, 2b, 2c and 3e–3q).

E.g.

Differentiation

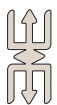
Review the differentiated activities in the uploaded learning plan to ensure all diverse abilities of learners have been given proper attention. Offer suggestions for improvement, etc.

Hint



Continue chatting with your App to verify the following and use the responses to complete your plan

- a) essential questions
- b) learning activities
- c) assessment tasks, etc.



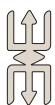
Note

- i. Chatting once may not be enough for the App to provide all that you may need for the tasks
- ii. Transfer the information from your SS App into your learning planner template to complete your plans.
- iii. Chat with your App to learn how to integrate National Values, GESI, SEL and 21st century skills in your learning activities, assessment tasks and rubrics/mark scheme.

- 2.2** Identify a challenging area or issue and chat with your subject specific App for steps on how to address it for effective lesson delivery (NTS 3j).
- 2.3** Share your experience with the group.

3.0 Enactment (25 minutes)

- 3.1** Enact a teaching activity in your plan (NTS 1b, 1f, 1g, 2c, 2e, 2f and 3c–3j).
- 3.2** Reflect on the activity enacted to improve lesson delivery (NTS 1a).
- 3.3** Ask for feedback on the activity enacted (NTS 1a, 1e, 2c and 3o).



Note

You may record the enacted activity.

4.0 Reflection (10 minutes)

- 4.1** Reflect and share your views on the session (NTS 1a, 1b).
- 4.2** Identify a colleague to observe your lesson in relation to PLC Session 23 to provide feedback on your lesson (NTS 1f, 1g).
- 4.3** Remember to:
 - a.** Read PLC Session 24, Teacher Manual and related Learner Material (NTS 3a).
 - b.** Bring along your laptop, Teacher Manual and PLC Handbook in preparation for the next session (NTS 3a).
 - c.** Identify areas you find challenging in your teaching for discussion during the next session.

PLC Session 24: Preparing for End of Semester Examination

1.0 Introduction (10 minutes)

- 1.1 Share one thing on assessment in PLC Session 23 that you
 - a. applied in your lesson delivery
 - b. found challenging and how you addressed it.
- 1.2 Share one challenge you encountered while populating your learning plan for Week 24 before the session that you would like to discuss during this PLC session.
- 1.3 Read and discuss the Purpose, Learning Outcome (LO) and Learning Indicators (LIs) for the session.

Purpose: The purpose of this session is to use the subject-specific App to

1. review the completed learning plan for Week 24
2. prepare assessment tasks and rubrics for end of semester examination

Learning Outcome (LO): To review the learning plan for Week 24 and address any challenges in planning and developing assessment tasks for the end of semester examination (NTS 2b, 2c, 2e, 2f, 3a, 3d, 3e, 3g–3k and 3o).

Learning Indicator (LI) 1: Review the learning plan and address challenges in the preparation and delivery of a lesson.

Learning Indicator (LI) 2: Discuss, develop and review assessment tasks with rubrics for the end of semester examination.

2.0 Reviewing the Learning Plan (20 minutes)

- 2.1 Upload your learning plan into the subject-specific App. Have a chat with your App to verify the following and discuss their suitability to reflect the diverse needs of learners in your class (NTS 1a, 2b, 2c and 3e–3q).

E.g.

Differentiation

Refer to the uploaded learning plan and check if the lesson is tailored to accommodate varied learners' abilities. Offer suggestions for enhancements, etc.

Hint



Continue chatting with your App to verify the following and use the responses to complete your plan

- a) essential questions
- b) learning activities
- c) assessment tasks, etc.

3.0 Prepare for End of Semester Examination (50 minutes)

- 3.1** Refer to your Teacher Manual for the format of the end of semester examination and use the subject-specific App to review or develop your assessment tasks, mark schemes/rubrics, etc. (NTS 2a-2c, 2e-2h and 3j-3q).

E.g.

With reference to the Teacher Manual, the end-of-semester assessment task structure and guidelines include covering all indicators from weeks 13 to 24. Based on the required indicators and their respective Dok levels. Propose a three-hour assessment items as:

1. 50 MCQs, distributed as follows: 30% Dok level 1, 40% Dok level 2, and 30% Dok level 3
2. One compulsory map-based question at DoK level 3 or 4
3. Three essay questions at DoK level 3
4. Provide rubrics and mark schemes for each of the tasks, etc.



Note

In preparing for mid-semester or end of semester examination, one prompt may not be enough for the App to provide all you need (DoK levels, structure, distribution across DoK levels, etc.)

- 3.2** Have a chat with your App to review the suggested assessment tasks and discuss the suitability of the responses from activity 3.1. Use the

review to refine the responses to complete the set questions (NTS 1a, 2b, 2c and 3e–3q). In doing this activity, consider:

E.g.

i. Whether the assessment tasks generated follow 30%, 40%, 30% DoK distribution

Verify whether the assessment test items follow the 30:40:30 DoK distribution and the MCQs include good distractors. Provide recommendations to improve them, etc.

ii. Mark scheme and score distribution

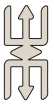
Verify whether the marking scheme aligns with the questions and the mark allocation is appropriate. Provide suggestions for improvement, etc.

iii. Resources needed for assessment administration

Recommend appropriate resources required for administering the 3-hour assessment task, etc.

iv. How to provide feedback

Suggest ways to provide constructive feedback on the assessment. Include the mode of the feedback, strengths, and weaknesses. Make recommendations to improve subsequent teaching and learning.



Note

Use the responses to complete your plan

4.0 Reflection (10 minutes)

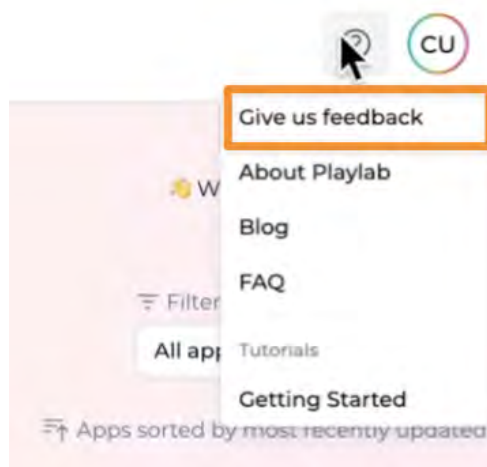
- 4.1** Reflect and share your views on the session (NTS 1a, 1b).
- 4.2** Identify a colleague to observe your lesson in relation to PLC Session 24 to provide feedback on your lesson (NTS 1f, 1g).
- 4.3** Remember to mark, record and upload your learners' assessment scores in the Student Transcript Portal (NTS 3j, 3n).

Appendix 1: Subject Specific App Teaching & Learning Apps – Issue Reporting Guide

How to Report Issues or Get Support

You have three ways to report issues with the subject-specific apps:

1. Email Support
 - For general issues: Send email to: support@playlab.ai
 - Include:
 - Your school name and region
 - Subject app you're using
 - Description of the issue
 - Screenshots or screen recordings (if possible)
 - Best for: School administrators reporting multiple app issues
 - Response time: Within 24 hours
 - If Urgent please include [URGENT] Message Text in your subject line.
2. Submit Feedback in Playlab
 - In the app, Click the “Give us Feedback” link in the menu and share feedback.



- Access the Feedback Form here
- Complete the form and upload any supporting documentation. (The more detailed your submission is, the more helpful support will be)



User Feedback Form

We want to hear your feedback and learn more about how we can improve Playlab for you. *Please complete this form to submit your feedback to the Playlab team.*

Full Name*

Your answer

Email*

Your answer

What is your role?*

Your answer

Please share your feedback

What challenge are you facing? What feature would you like to see?

Your answer

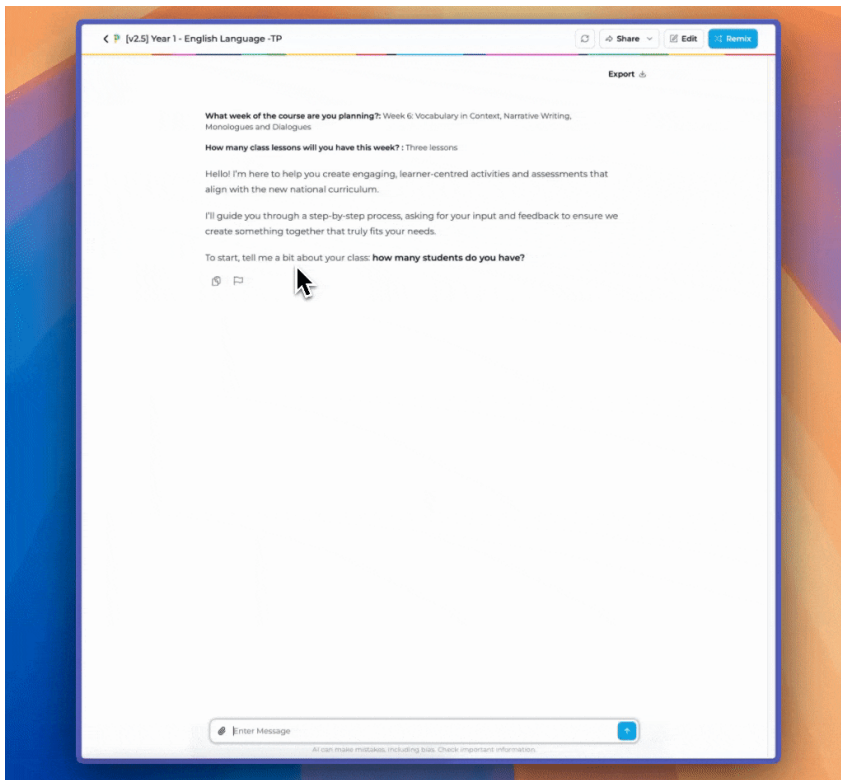
Please share any screenshots or videos that help visualize your feedback.

 **Upload** Size limit: 100 MB. File limit: 10.

Submit

Never submit sensitive personal information, like passwords, through Notion Forms.
[Report abuse](#)

- Best for: Individual teachers reporting specific issues
 - Response time: Within 24–48 hours
3. In-Chat Flagging
- Look for the flag button within your chat conversation



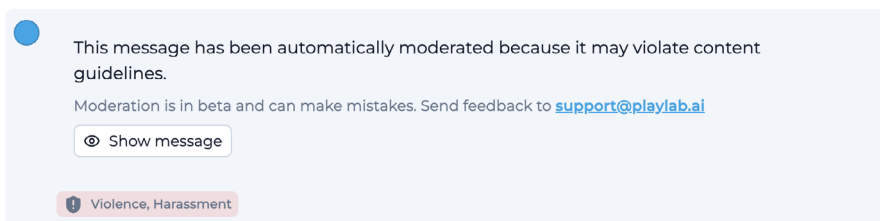
- Click to report biased, inaccurate, or inappropriate messages.
- Best for: Immediate issues with app responses
- There is also in app moderation for both user messages and AI generated responses. You can read more about it here.

What Happens After You Report?

1. The message will be flagged in your user activity. You will see indicators of messages that have been moderated or flagged.

KIPP NYC Restorative Plan Designer	8/21/2025
	 7  1
KIPP NYC Restorative Plan Designer	8/21/2025
	 5
KIPP NYC Restorative Plan Designer	8/15/2025
	 7  1

2. You can review the messages in activity. By default the message is hidden unless you click “show message”.



Thank you for sharing the details of the incident. Here's the step-by-step analysis and proposed restorative plan based on the provided situation:

3. If something is consistently being flagged, you may want to address it in your implementation, make revisions to the app, or contact support@playlab.ai for more guidance.

Tips for Effective Reporting:

- Be specific about what you were trying to do
- Note which subject app you're using
- Include your school and region information
- Describe what happened versus what you expected

Additional Support Resources

1 App Basics:

- Starting a conversation
 - Scan your QR code to use your app.
- If you encounter a problem, follow the directions for Escalating an issue.

Video Tutorials

- a Lesson Planning Walkthrough: Step-by-step guide using a real subject app with sample conversations
 - Lesson Plan Development
 - Watch a sample conversation here.
 - As you're using the apps, you can provide specifics on how you might want to differentiate for class needs
 - Assessment Development
 - Watch a sample conversation here.

- As you're using the apps, you can adjust the DOK levels as you create assessments at different complexity levels
- b For any additional questions please refer to the learn.playlab.ai page.

Key Reminders

- 1 Apps are supplemental tools to support your PLC Handbook and Teacher Manual—not replace them
- 2 Always refer to official curriculum documents as your primary resource
- 3 Use your professional judgment to adapt app suggestions for your classroom context

Appendix 2: Learning Planner Template

Name of Subject:							
Learning Planner Template Year Two							
Number of Learners in Class		Week		Duration		Form	
Strand							
Sub-Strand							
Content Standard							
Learning Outcome(s)							
Learning Indicator(s)							
Essential Question(s)							
Pedagogical Strategies							
Teaching & Learning Resources							
Key Notes on Differentiation Identify the different learner needs in your class and make notes on how to cater for them during the lesson							
Lesson (complete per number of lessons for the week)							
Refer to the Teacher Manual and Learner Material to complete this section							
Introduction Main Lesson Closure							

Key Assessment	
1.	Formative Assessment Mode: Task: Mark Scheme:
2.	Key Assessment for Student Transcript Portal Assessment Mode: Task: Rubric/Mark Scheme:
Reflection & Remarks	

Appendix 3: Teacher Lesson Observation Form

Teacher Lesson Observation Form

Name of School

Subject being observed

Class

Year 1

Year 2

Year 3

Sex of the teacher

Male

Female

1. Is the purpose of the lesson clearly stated in the lesson plan and focused on learners achieving the lesson learning outcomes?

Yes

In Part

No

NA

b1. Please provide an explanation to your answer in Q1 above

2. Are the unique needs of female learners, male learners, and learners with special education needs adequately catered for in the lesson plan? For example, the choice of teaching methods and learning activities reflects/does not reflect the learning needs of all learners.

For example, the choice of teaching methods, and learning activities.

Yes

In Part

No

NA

2b. Please provide an explanation to your answer in Q2 above

3. Does the teacher manage behavior well, maintaining a positive and non-threatening learning environment throughout the lesson?

Yes In Part No NA

3b. Please provide an explanation to your answer in Q3 above

4. Are appropriate teaching and learning materials and other resources (including ICT, books, desks) available, accessible and being used to support learning of all females, males and learners with special education needs?

Yes In Part No NA

4b. Please provide an explanation to your answer in Q4 above

5. Are learners engaged on tasks that challenge them in line with the content standards?

Does the teacher take into consideration the uniqueness of learners?

Yes In Part No NA

5b. Please provide an explanation to your answer in Q5 above

6. Is there evidence that students are learning?

Yes In Part No NA

6b. Please provide an explanation to your answer in Q6 above

7. Is teaching differentiated to cater for the varied needs of all learners (i.e., male learners, female learners, learners with special education needs) and those with poor literacy and/ or numeracy proficiency?

Yes In Part No NA

7b. Please provide an explanation to your answer in Q7 above

8. Does the teacher use real life examples which are familiar to learners to explain concepts?

Yes In Part No NA

8b. Please provide an explanation to your answer in Q8 above

9. Does the teacher point out or question traditional gender roles when they come up during the lessons as appropriate?

Yes In Part No NA

9b. Please provide an explanation to your answer in Q9 above

10. Does the lesson include appropriate interactive and creative approaches e.g., group work, role play, storytelling to support learners achieving the learning outcomes?

If yes, give examples of the issues and skills that have been so integrated.

Yes In Part No NA

10b. Please provide an explanation to your answer in Q10 above

11. Have cross-cutting issues and /or 21st century skills been integrated into the lesson to support learners in achieving the learning outcomes e.g., problem-solving, critical thinking, communication? If yes, give examples of the issues and skills that have been so integrated.

Yes In Part No NA

11b. If yes, give examples of the issues and skills that have been so integrated.

12. Does the teacher incorporate ICT into their practice to support learning?

Yes In Part No NA

12b. Please provide an explanation to your answer in Q12 above

13. Does the teacher encourage all female male and male learners (including those who may be shy or afraid to speak) to ask questions, answer questions, participate in group work, etc. during the lesson?

Yes In Part No NA

13b. Please provide an explanation to your answer in Q13 above

14. Is assessment evident in the lesson? If yes, does it include assessment as, for or of learning and go beyond recall?

If yes, did it include assessment of, for or as learning and go beyond recall?

Yes In Part No NA

14b. Please provide an explanation to your answer in Q14 above

15. Do learners make use of feedback from teacher and peers?

Yes In Part No NA

15b. Please provide an explanation to your answer in Q15 above

16. Does the teacher sum up the lesson and evaluate the lesson against the learning outcomes with the learners?

Yes In Part No NA

16b. Please provide an explanation to your answer in Q16 above

17. Does the teachers' planning of lessons taught before the one observed show how they plan for learning over time, considering individual and group needs?

Yes In Part No NA

17b. Please provide an explanation to your answer in Q17 above

18. Does the teacher pay attention to the composition of females and males during group work and assigns females leadership roles.

Yes In Part No NA

18b. Please provide an explanation to your answer in Q18 above

19. Does the teacher provide constructive verbal feedback to both females and males and learners with special education needs?

Yes

In Part

No

NA

19b. Please provide an explanation to your answer in Q19 above

20. Does the teacher provide constructive written feedback to both females and males and learners with special education needs in their exercise book?

Yes

In Part

No

NA

20b. Please provide an explanation to your answer in Q20 above

21. Key strengths
in the lesson

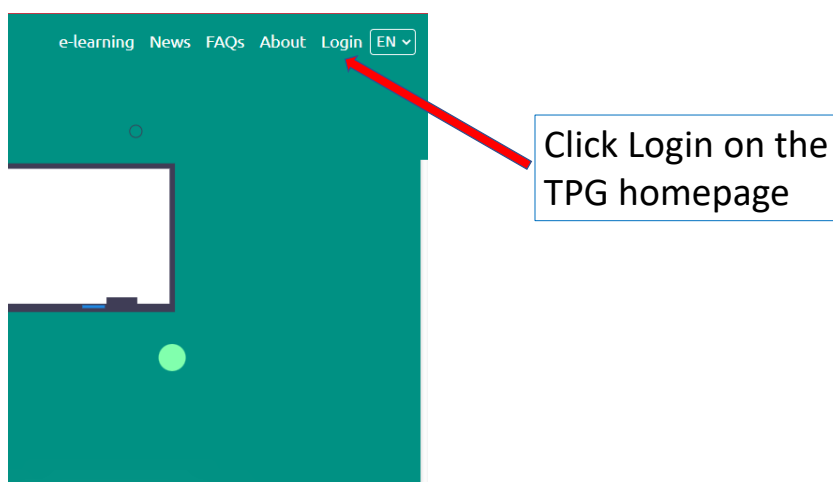
22. Areas for
development

23. Next steps for
teacher

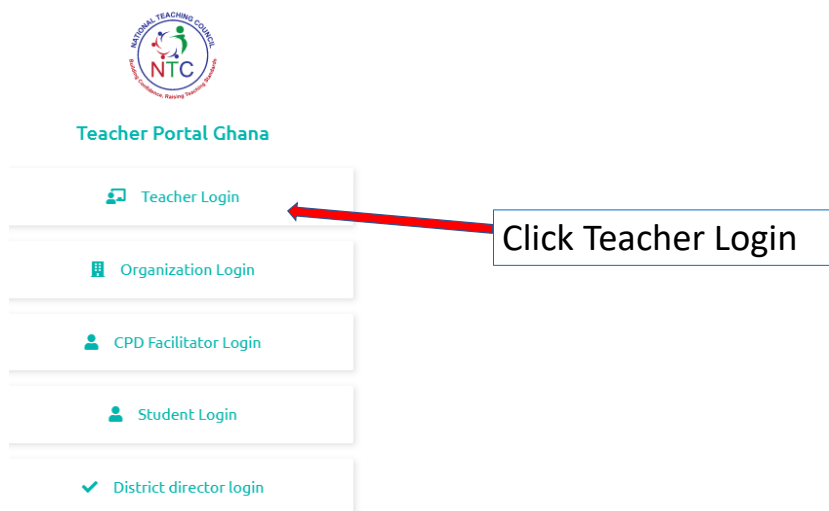
Additional Notes (on teacher's actions, the flow of activities, etc.)

Appendix 4: How to check CPD Points and Training Records on Teacher Portal Ghana

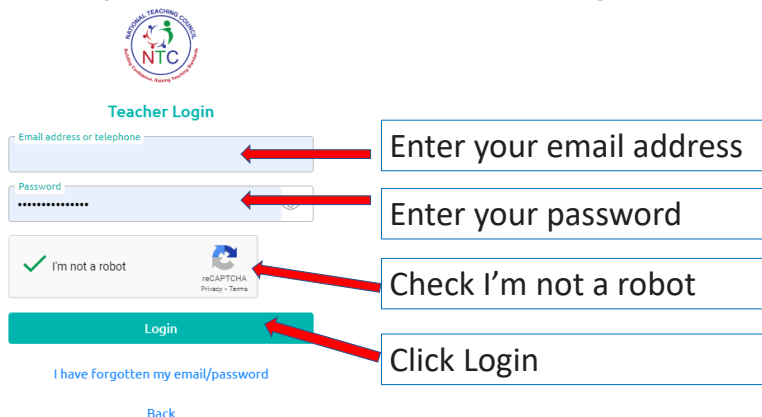
1. Visit tpg.ntc.gov.gh and click Login



2. On the Login page, click Teacher Login



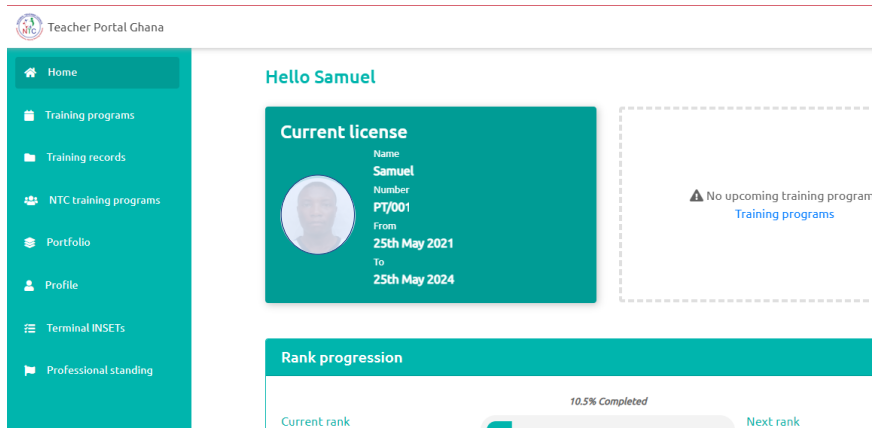
3. On the **Teacher Login** page enter your email address and password and then click **Login**



The image shows the Teacher Login page with the following elements and annotations:

- Teacher Login** (Page Title)
- Email address or telephone** (Input field) → **Enter your email address**
- Password** (Input field) → **Enter your password**
- I'm not a robot** (CAPTCHA) → **Check I'm not a robot**
- Login** (Button) → **Click Login**
- [I have forgotten my email/password](#)
- [Back](#)

4. After a successful login you will get access to your **TPG account** (Check image below)



The image shows the Teacher Portal Ghana dashboard for a user named Samuel. The dashboard includes the following sections:

- Header:** Teacher Portal Ghana
- Left Sidebar:** Home, Training programs, Training records, NTC training programs, Portfolio, Profile, Terminal INSETs, Professional standing
- Main Content:**
 - Hello Samuel**
 - Current license:**
 - Name: Samuel
 - Number: PT/001
 - From: 25th May 2021
 - To: 25th May 2024
 - Rank progression:**
 - Current rank
 - 10.5% Completed
 - Next rank
 - No upcoming training program:** Training programs

5. To check CPD points, scroll down to **Rank progression**. You will see the CPD points progress bar and actual points accrued (Check image below)



6. To view training records, from the side menu tap on **Training records** (Check image below)

The image shows the 'Teacher Portal Ghana' interface. On the left is a teal side menu with options: Home, Training programs, Training records, NTC training programs, Portfolio, Profile, Terminal INSETs, and Professional standing. A red arrow points from the 'Training records' option to a text box. The main content area is titled 'Training records' with the subtitle 'Records for training programs registered and/or attended'. It shows 'Total points: 1.8988'. Below this is a list of training programs with their status and credits. A red bracket on the right groups the list of programs, with an arrow pointing to a text box. A text box at the bottom left points to the 'Training records' menu item.

Teacher Portal Ghana

Training records
Records for training programs registered and/or attended

Total points: 1.8988

Training Program	Status	Credits
Sensitization on Education Policies	Marked as absent	
Differentiated Learning	Processed	1.32
Advanced Mobile Learning with Multimedia (AMLW)	Processed	0.5788

List of training programs

Click to view training records

THANK YOU

