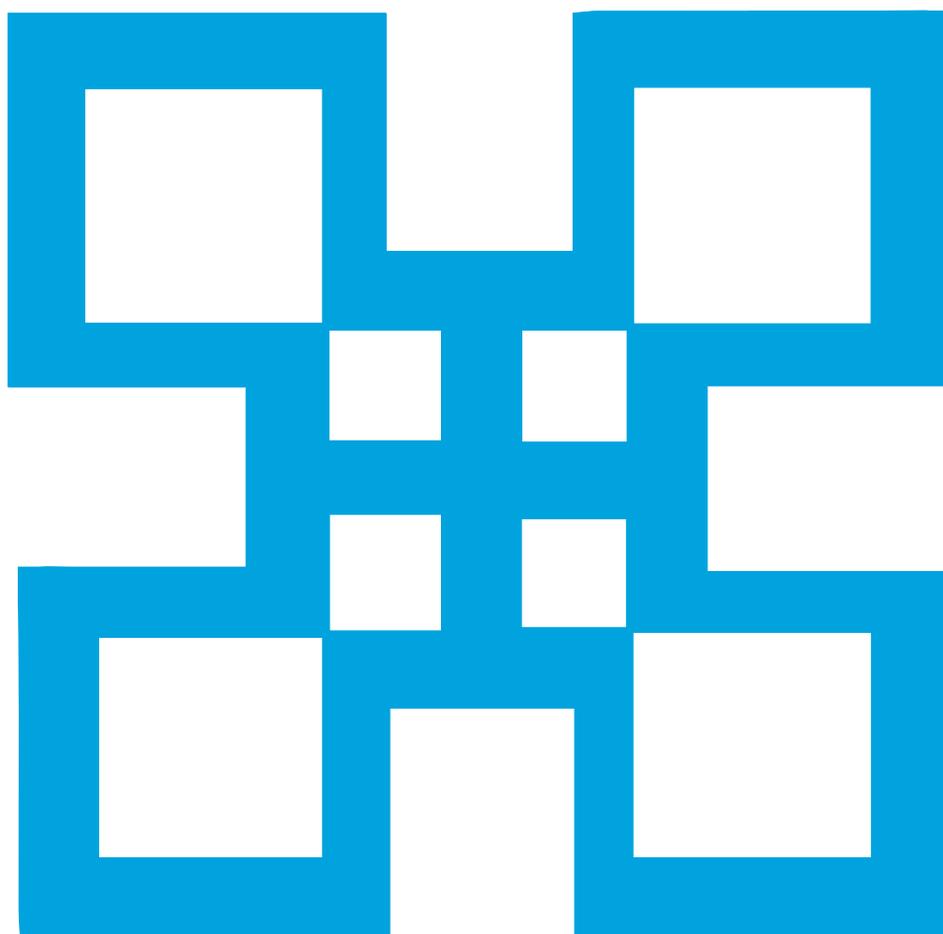# Professional Learning Community Handbook 1

Working to the National Teachers' Standards

HANDBOOK FOR **CORDINATORS**

Wisdom, Knowledge and Prudence

Ghana Education Service (GES)

NATIONAL TEACHING COUNCIL

NTC

Building Confidence, Raising Teaching Standards

GOVERNMENT OF GHANA

Professional Learning Community Handbook 1

Working to the National Teachers' Standards

Coordinator Version

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FOREWORD

Ghana Education Service has collaborated with the National Teaching Council, tutors of Colleges of Education, the University for Development Studies, Accra and Takoradi Technical Universities, and teachers from 12 Senior High Schools, Senior High Technical Schools, and Technical Institutes to develop this maiden Professional Learning Community (PLC) Handbook. The (PLC) Handbook is intended to assist Heads of Secondary Schools and teachers to run weekly PLC sessions in schools. These PLC sessions are dedicated periods in the school's weekly schedule where all teachers come together and work collaboratively to improve teaching and learning.

PLC sessions will help teachers to build a collective understanding of how to improve outcomes for all learners in their schools through a series of practical activities such as lesson study, team teaching and action research. The involvement of teachers from 12 Senior High Schools, Senior High Technical Schools, and Technical Institutes in the writing of this Handbook means that the primary users of the Handbook are the ones who have been involved in its creation, helping to ensure its relevance and practicality.

This first PLC Handbook focuses on strengthening understanding, awareness, and adherence to the National Teachers' Standards (NTS). The standards provide the foundations upon which Ghana's educational reforms are built as they specify the three things needed to develop an effective teacher:

1. Professional Values and Attitudes - the dedication to learn and improve and become the best teacher you can be
2. Professional Knowledge- of the subjects and content of the curriculum being taught
3. Professional Practice- the understanding of how to encourage participation, critical thinking and achieve intended learning outcomes

The PLC Handbook is designed to improve quality and relevance of teaching and learning through experiential sharing and strategies which also incorporate Gender, Equality and Social Inclusion (GESI), Information and Communication Technology (ICT) and 21st Century Skills.

The Handbook is structured in 12 units which are applicable for all SHSs and 8 units of TVET to cater for the specific needs of Technical Institutes.

It is our hope and expectation that this PLC Handbook represents an important step in the transformation of our secondary education system and that it will be used effectively across all Ghanaian secondary education institutions.

Dr. Eric Nkansah
Director-General
Ghana Education Service

PROFESSIONAL LEARNING COMMUNITY HANDBOOK 1
WORKING TO THE NATIONAL TEACHERS' STANDARDS – COORDINATOR VERSION

1. Background to the PLC Sessions in this Handbook.

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There are twelve weekly PLC Sessions designed to prepare teachers to teach subjects in the secondary school curriculum to the National Teachers' Standards. The Sessions are not subject specific although teachers who teach Technical and Vocation Education and Training (TVET) subjects have access to a subject specific version of eight of the Sessions (-i.e., Sessions 5-12).

The PLC Sessions are designed to help operationalize the reform of secondary education at both teacher and student levels and to support:

► professionalising teaching by supporting teachers in developing communities of practice and enhancing their professionalism.
► improving the learning outcomes and life chances for all learners.

2. Features of the PLC Sessions.

► The main resources for the weekly teacher Sessions are PLC Teacher Handbook and the PLC Coordinator Handbook.
► Both versions are written to provide information to guide the twelve weekly PLC Sessions that are linked directly to the National Teachers' Standards.
► The PLC Coordinator Handbook has prompts for leading the PLC Session.
► The teacher PLC handbook contains activities for teachers and guidance for what they will do during the Session.
► The weekly PLC Sessions are of an hour and a half duration.

PLC Session 1: Gender Equality and Social Inclusion (GESI)

	Guidance notes on Leading the session. *What the PLC Coordinator will have to say during each stage of the session*	Guidance Notes on Teacher Activity during the PLC Session. *What teachers will do during each stage of the session.*	Time in session

1. Introduction to session .	1.1 Ask a teacher to start the PLC session with an icebreaker.
	
	1.2 Ask teachers to read the introduction to Gender Equality and Social Inclusion (GESI) and the learning outcome (LO) as well as learning indicators (LIs) below. Invite opinions from both male and female teachers including those with special needs, where applicable (NTS 1a,1e, 2b and 3f).
	
	Introduction to GESI:
	   a) **Purpose of GESI in all subject areas**
	Communities all over the world consist of diverse individuals and social groupings that have different needs, strengths, opportunities, and concerns as a result of differences in culture, gender, religion, abilities, economic and social status. As a teacher, it is important to understand the uniqueness of the diverse groups in the classroom and ensure that every individual is supported to access quality education. GESI in schools is being championed towards promoting equal opportunity for females and males as well as all other
		1.1 Start the PLC session with an icebreaker.
		
		1.2 Read the introduction to Gender Equality and Social Inclusion (GESI) and the learning outcome (LO) as well as learning indicators (LIs) below and provide your opinions on same (NTS 1a,1e, 2b and 3f).
		
		Introduction to GESI:
		   a) **Purpose of GESI in all subject areas**
		Communities all over the world consist of diverse individuals and social groupings that have different needs, strengths, opportunities, and concerns as a result of differences in culture, gender, religion, abilities, economic and social status. As a teacher, it is important to understand the uniqueness of the diverse groups in the classroom and ensure that every individual is supported to access quality education. GESI in schools is being championed towards promoting equal opportunity for females and males as well as all other disadvantaged groups in the classroom. Teachers need to have a clear understanding of GESI issues to be able to
			25 mins

		disadvantaged groups in the classroom. Teachers need to have a clear understanding of GESI issues to be able to integrate these in the teaching and learning process and other aspects of school life and to encourage learners to do same during learning. A teacher is an agent of change who promotes gender equality and social inclusion in the classroom. A teacher challenges stereotypical thinking from the society by changing the mindset of the young generation.	integrate these in the teaching and learning process and other aspects of School life and to encourage learners to do same during learning.	
2		**b) Overview of GESI and related concept.** This session seeks to expose teachers in all the subject areas (in all second cycle institutions) to the concept to GESI and related issues such as Gender, Equality, Equity, Inclusion, etc., to enable them appreciate issues of stereotyping and work towards challenging traditional gender roles as well as dealing with their own unconscious biases so they can attend to the diverse needs of all learners in the classroom and in the schools generally. *Note* *LO (Learning Outcome): This is the expected knowledge, understanding, skills, etc., to be acquired at the end of a lesson. LI (Learning Indicator): This is the practical evidence that learning has taken place. It may include verbal responses, practical activity, or products.*	**b) Overview of GESI and related concept.** This session seeks to expose teachers in all the subject areas (in all second cycle institutions) to the concept to GESI and related issues such as Gender, Equality, Equity, etc., to enable them appreciate issues of stereotyping and work towards challenging traditional gender roles as well as dealing with their own unconscious biases so they can attend to the diverse needs of all learners in the classroom and in the schools generally. *Note* *LO (Learning Outcome): This is the expected knowledge, understanding, skills, etc., to be acquired at the end of a lesson. LI (Learning Indicator): This is the practical evidence that learning has taken place. It may include verbal responses, practical activity or products.*	

	LO: Demonstrate understanding of the relevance of GESI and related issues in the National Teachers' Standards (NTS). LI 1 Discuss the concept of GESI and related issues. LI 2 Plan teaching and learning activities that integrate the concept of GESI. LI 3 Plan activities that help learners to understand GESI responsiveness and apply them during learning.	**LO:** Demonstrate understanding of the relevance of GESI and related issues in the National Teachers' Standards (NTS). LI 1 Discuss the concept of GESI and related issues. LI 2 Plan teaching and learning activities that integrate the concept of GESI. LI 3 Plan activities that help learners to understand GESI responsiveness and apply them during learning.	3

| | | 1.3 Ask teachers to explain what GESI means (NTS 3i).

Gender, **E**quality and **S**ocial **I**nclusion (GESI) is a concept that addresses unequal power relations experienced by people on the grounds of gender, wealth, ability, location, ethnicity, religion, language and agency or a combination of these dimensions.
GESI Responsive Checklist for Teachers

1.4 Using talk for learning strategies (concept cartoons, storytelling, role play, discussion, etc.), ask teachers in their subject groups to explain any **two** concepts related to GESI and how each concept is linked to education. Allow teachers to use their phones/laptops to do the search (NTS 3g, 3i and 3j).
E.g.
Social exclusion: Persons with disabilities may be excluded from various activities due to their inability to participate in such activities. If no adjustment is made to address the limitation, they will remain excluded.

In education, exclusion may occur if the classroom is located at a place where it is not accessible to learners in wheelchairs or if the teacher uses a teaching method (e.g., discussion) that is not accessible to learners with special educational needs (SEN) (such as those with hearing impairment). | 1.3 Explain what GESI means (NTS 3i).

Gender, **E**quality and **S**ocial **I**nclusion (GESI) is a concept that addresses unequal power relations experienced by people on the grounds of gender, wealth, ability, location, ethnicity, language and agency or a combination of these dimensions.
GESI Responsive Checklist for Teachers

1.4 In your subject groups, use talk for learning strategies to explain any **two** concepts related to GESI and how each concept is linked to education. (You may use your phones/laptops to do the search)
(NTS 3g, 3i and 3j).

E.g.
Social exclusion: Persons with disabilities may be excluded from various activities due to their inability to participate in such activities. If no adjustment is made to address the limitation, they will remain excluded.

In education, exclusion may occur if the classroom is located at a place where it is not accessible to learners in wheelchairs or if the teacher uses a teaching method (e.g., discussion) that is not accessible to learners with special educational needs (SEN)(such as those with hearing impairment). | |

| | | 1.5 Ask one teacher to read aloud the notes on GESI below: **Gender** is the relationship between females and males and the roles and responsibilities they have in society. For example, in Ghana, it is socially accepted that cooking is the role of women and providing upkeep money for the family is the role of men.

Equality is creating equal opportunities for males and females. It is a fundamental right, and it is often the GOAL. It seeks to ensure that all learners are given equal opportunities at improved academic outcomes irrespective of their unique needs. In essence, everyone gets to achieve their highest potential.

Equity refers to a fair sharing of resources, opportunities, and benefits according to the unique needs of the individual or group. It is often the means or process towards achieving equality. Equity is the means and equality is the goal.

Note that Equality is not a harmful concept, nor is equity a better concept. Equity is the process of achieving Equality, which is the outcome. GESI Responsive Checklist for Teachers, 2015).

Inclusion is the process of valuing all individuals and leveraging their diverse talent, not in spite of their differences, but because of | 1.5 Read aloud the notes on GESI below: **Gender** is the relationship between females and males and the roles and responsibilities they have in society. For example, in Ghana, it is socially accepted that cooking is the role of women and providing upkeep money for the family is the role of men.

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Inclusion is the process of valuing all individuals and leveraging their diverse talent, not in spite of their differences, but because of | |
|---|---|---|---|

	their differences. For example, ensuring that **all** learners (boys, girls and SEN) are given equal opportunities to participate in the classroom. **Gender Equality** is a state where males and females have equal rights, life prospects and opportunities to shape their own lives and contribute to society. **Social Inclusion** is the process of improving the terms of participation for people who are disadvantaged, through enhancing opportunities and access to resources. 1.6 Ask teachers to reflect on their understanding of GESI and justify the need for GESI in education (NTS 1a, 1c, 1f, 3f, 3h and 3i). *E.g.* *The classroom and school environment have been skewed in ways that condone gender bias and promote exclusion.* *Male characters are often represented more than female characters in teaching/learning materials (TLMs) and textbooks.* *Persons with SEN are often disadvantaged during some classroom activities: the visually impaired learner loses out when pictures are used. The hearing- impaired learner loses out when only verbal language is used. And the learner with language or speech difficulty is mocked by colleagues and sometimes teachers making them lose confidence and interest to contribute in class.*	their differences. For example, ensuring that **all** learners (boys, girls and SEN) are given equal opportunities to participate in the classroom. **Gender Equality** is a state where males and females have equal rights, life prospects and opportunities to shape their own lives and contribute to society. **Social Inclusion** is the process of improving the terms of participation for people who are disadvantaged, through enhancing opportunities and access to resources. 1.6 Reflect on your understanding of GESI and justify its importance in education (NTS 1a, 1c, 1f, 3f, 3h and 3i). *E.g.* *The classroom and school environment have been skewed in ways that condone gender bias and promote exclusion.* *Male characters are often represented more than female characters in teaching/learning materials (TLMs) and textbooks.*	

2. Overcoming GESI related misconceptions, negative perceptions, stereotypes and other challenges	2.1 Ask teachers to identify and discuss how the GESI concepts they have been introduced to in the session could be useful in their teaching and general school life (NTS 2f, 3g, 3k, 3l, 3m and 3n). *E.g.* *a) Inclusion: mix ability/gender grouping; involving all categories of learners in every teaching activity.* *b) Equity: providing support and resources in line with the needs of each learner.* 2.2 Using think-pair-share, ask teachers to identify possible barriers to learning in relation to	2.1 Identify and discuss how the GESI concepts introduced in the session could be useful in your teaching and general school life (NTS 2f, 3k, 3l, 3m and 3n). *E.g.* *Inclusion: mix ability/gender grouping; involving all categories of learners in every teaching activity.* 2.2 Reflect individually, share with a colleague and then the entire group possible barriers	20 mins

8	GESI and how to address them (NTS 3f, 3m). *E.g.* ***Stereotypes:*** *Certain roles are for specific gender; boys are brave and can dissect rodents in science lessons more easily than girls while girls are better cooks than boys. This can be addressed by citing instances where girls demonstrate bravery and boys have been better cooks.* ***Negative perception****: Persons with special education needs are low achievers. This can be addressed by giving examples of persons with special education needs who have excelled in various aspects of life. An example is Farida Bedwei - a lady living with cerebral palsy who is a software engineer and co-founder of Logiciel, a fin-tech company in Ghana.* *Dr. Henry Seidu Daanaa, a person with visual impairment who is a lawyer, a former Minister of Chieftaincy and Traditional Affairs in Ghana and a consultant.* (Teachers may share their experiences of unfair treatment/unconscious biases that constitute barriers to GESI). 2.3 Ask teachers to identify and share GESI responsive practices that can help in creating GESI friendly school and classroom environments in the context of second cycle institutions (NTS 1c, 3e, 3g and 3j).	to learning in relation to GESI and how to address them (NTS 3f, 3m). *E.g.* ***Stereotypes:*** *Certain roles are for specific gender; boys are brave and can dissect rodents in science lessons more easily than girls while girls are better cooks than boys. This can be addressed by citing instances where girls demonstrate bravery and boys have been better cooks.* ***Negative perception****: Persons with special educational needs are low achievers. Address this by giving examples of persons with SEN who have excelled in various aspects of life. An example is Farida Bedwei - a lady living with cerebral palsy who is a software engineer and co-founder of Logiciel, a fin- tech company in Ghana.* (Teachers may share their experiences of unfair treatment/unconscious biases that constitute barriers to GESI). 2.3 Identify and share GESI responsive practices that can help in creating GESI friendly school and classroom environments in the context of second cycle institutions (NTS 1c, 3e, 3g and 3j).	

	E.g. a) *Involving men and women equally in decision making* b) *ensuring that all school facilities are accessible to everyone (abled bodied and persons with* upkeep *disability)* c) *Equitable allocation of resources among all school actors (males, females, minority groups, etc.)* d) *Leadership Positions: School prefects are mostly boys; girls and learners with special education needs could equally be appointed school prefects.*	E.g. a) *Involving men and women equally in decision making* b) *ensuring that all school facilities are accessible to everyone (abled bodied and persons with disability, etc.)* upkeep	
3. Implementing GESI in teaching, learning and assessment.	3.1 Ask teachers to discuss in their subject groups and come out with strategies on how GESI can be integrated in their specific subject areas (NTS 1a, 3e and 3g). *E.g.* a) *Using multiple methods (question and answer, discussion, videos, role play, etc.) in lessons to cater for different learning styles* b) *Using different learning resources (audio, visuals, audio-visuals, tactile, etc.) to cater for different learning styles* c) *Using different assessment methods (written assignments, oral assessment, online assessment, etc.) to cater for different learning styles* d) *Making reasonable adjustments to tasks and assessments to reflect the different abilities of learners.*	3.1 Discuss in your subject groups and come out with strategies on how GESI can be integrated in your specific subject areas (NTS 1a, 3e and 3g). *E.g.* a) *Using multiple methods (question and answer, discussion, videos, role play, etc.) in lessons to cater for different learning styles* b) *Using different learning resources (audio, visuals, audio-visuals, tactile, etc.) to cater for different learning styles*	30 mins

	3.2 Lead teachers to identify and discuss possible strategies to make projects and portfolios GESI responsive (NTS 1a, 3a). *E.g.* a) *Equitable distribution of relevant resources for projects* b) *Ensure projects' content does not portray GESI biases and stereotypes.* c) *In grouping learners for projects, ensure mix ability/gender groupings* **Note:** Remind teachers to consciously ensure GESI responsiveness in conducting continuous assessment in their various disciplines. *E.g.* a) *Ensure that leadership roles are assigned equally among females, males and learners with special education needs (SEN) when assessments (projects) are done in groups.* b) *Ensure equitable distribution of resources among male learners and female learners including SEN learners.* 3.3 Ask teachers in their subject groups, to identify and discuss the links to GESI resources such as the Gender Handbook for Second Cycle Schools and T-TEL Gender Handbook for Teaching Practice Mentors (NTS 3h, 3j).	3.2 identify and discuss possible strategies to make projects and portfolios GESI responsive (NTS 1a, 3a). *E.g.* a) *Equitable distribution of relevant resources for projects* b) *Ensure projects' content does not portray GESI biases and stereotypes.* **Note:** Make conscious efforts to ensure GESI responsiveness in conducting continuous assessment in your subject area *E.g.* *Ensure that leadership roles are assigned equally among females, males and learners with special education needs (SEN) when assessments (projects) are done in groups.* 3.3 identify and discuss the links to GESI resources such as the Gender Handbook for Second Cycle Schools and T-TEL Gender Handbook for Teaching Practice Mentors (NTS 3h, 3j).	

| | | *E.g.* https://campaignforeducation. o rg/en/press-centre/an-equal-world-is-an-enabled-world?gclid=EAIaIQobChMIiPqF x 8iW9wIVmpntCh213wroEAAYB C AAEgIjcfD_BwE https://plan-international.org/education/inc l usive-education-children-disability/?gclid=EAIaIQobChMI 3 OuI0cmW9wIVToFQBh1Wnw0 a EAAYASAAEgIN3PD_BwE https://www.worldvisionphila nt hropy.org/resources/gesi https://www.researchgate.net / publication/350109345_Gende r _Equality_and_Social_Inclusion_ DME_Toolkit | *E.g.* https://campaignforeducatio n. org/en/press-centre/an-equal- world-is-an-enabled-world?gclid=EAIaIQobChMIiP qF x8iW9wIVmpntCh213wroEAA Y BCAAEgIjcfD_BwE https://plan-international.org/education/i nc lusive-education-children-disability/?gclid=EAIaIQobCh MI 3OuI0cmW9wIVToFQBh1Wn w 0aEAAYASAAEgIN3PD_BwE https://www.worldvisionphila n thropy.org/resources/gesi | |
| | | 3.4 Ask a teacher to model a selected activity in a teaching situation that is linked to any of the LIs of the session. | 3.4 Model a selected activity in a teaching situation that is linked to any of the LIs of the session. | |

4. Evaluation and review of session:	4.1 Ask teachers to identify any outstanding issues relating to the session for clarification (NTS 1a, 3l and 3n).	4.1 Reflect and write what you have learnt in the session (NTS 1a, 3l and 3n).	15 mins
▶ Identifying and addressing any outstanding issues relating to the lesson/s for clarification	4.2 Ask teachers to share what they have learnt with the larger group. 4.3 Ask teachers to identify a critical friend to observe their lesson to provide feedback on how they have used GESI in the lesson and report at the next session	4.2 Share what you have learnt with the larger group. 4.3 Identify a critical friend to observe your lesson to provide feedback on how you have used GESI in the lesson and report at the next session	
▶ Noting that teachers need to identify critical friends to observe lessons and report at next session	4.4 Remind teachers to read Session 2 from the PLC Handbook in preparation for the next session. 4.5 Remind teachers to come to the next session (i.e., Session 2) with their phones, laptops and other ICT devices for the session on ICT.	4.4 Read session 2 from the PLC Handbook in preparation for the next session. 4.5 Come to the next session (i.e., Session 2) with their phones, laptops, and other ICT devices for the session on ICT.	

PLC Session 2: Information and Communications Technology (ICT)

	Guidance notes on Leading the session. What the PLC Coordinator will have to say during each stage of the session	*Guidance Notes on Teacher Activity during the PLC Session. What teachers will do during each stage of the session.*	*Time in session*
1. **Review of Previous Session and introduction to new session** **NB: The guidance for PLC Coordinator should identify, address, and provide explanations for any areas where teachers might require clarification on an aspect of the lesson.** **NB: PLC Coordinator should ask teachers to plan for their teaching as they go through the PLC session**	1.1 Start the session by asking teachers to share one thing they did differently in the classroom and elsewhere based on the session on *gender equality and social inclusion*, which they think impacted learning positively. 1.2 Ask teachers to discuss and summarise in a single sentence why they think what a colleague did by way of application of lessons learned in the session on *gender equality and social inclusion*, supported learning. 1.3 Introduce the session by asking one teacher to read the purpose, preamble, learning outcomes (LOs) and learning indicators (LIs) of the session. **a. Purpose of ICT in teaching and learning:** As indicated in the LOs and LIs below, this session is intended to:	1.1 Share one thing you did differently in the classroom and elsewhere based on the session on *gender equality and social inclusion*, which you think impacted learning positively. 1.2 Discuss and summarise in a single sentence why you think what a colleague did by way of application of lessons learned in the session on *gender equality and social inclusion*, supported learning. 1.3 Read the purpose, preamble, learning outcomes (LOs) and learning indicators (LIs) of the session. **a. Purpose of ICT in teaching and learning:** As indicated in the LOs and LIs below, this session is intended to:	30 mins

	i. Help teachers plan and teach learner-centred lessons using ICT. ii. Provide teachers access to and use of ICT tools for **assessment for** learning, assessment **as** learning and assessment **of** learning. iii. Introduce teachers to the use of ICT for the development of 21st century skills. iv. Guide teachers in the use of ICT software and hardware for teaching and learning. **b. Preamble** Teachers in the 21st century are facing new challenges because of the expanding possibilities of ICT integration in every aspect of the school curriculum. Irrespective of the level a teacher operates at with regards to ICT mediated teaching and learning, ICTs resources have the capability of bringing several benefits to teachers and students. The benefits may include shared learning resources, shared learning spaces and promotion of cooperative and collaborative learning. They also provide a base for autonomous learning.	i. Help teachers plan and teach learner-centred lessons using ICT. ii. Provide teachers access to and use of ICT tools for **assessment for** learning, assessment **as** learning and assessment **of** learning. iii. Introduce teachers to the use of ICT for the development of 21st century skills. iv. Guide teachers in the use of ICT software and hardware for teaching and learning. **b. Preamble** Teachers in the 21st century are facing new challenges because of the expanding possibilities of ICT integration in every aspect of the school curriculum. Irrespective of the level a teacher operates, at with regards to ICT mediated teaching and learning, ICTs resources have the capability of bringing several benefits to teachers and students. The benefits may include shared learning resources, shared learning spaces and promotion of cooperative and collaborative learning. They also provide a base for autonomous learning.	

	Welliver's Instructional Transformation Model sets goals and expectations for all teachers at whatever stage they are starting at. The five hierarchical stages, which have been explained below, start with familiarization, then utilization, integration, reorientation and finally revolution. ([www.welliversinstructional mod el.com](www.welliversinstructionalmodel.com), published 8th June, 2011, retrieved 8th April, 2022) i. **Familiarization:** This is when teachers become aware of technology and its potential uses. ii. **Utilization:** This is where teachers use technology, but minor problems will cause them to discontinue its use. iii. **Integration:** Here, technology becomes essential for the educational process and teachers are constantly thinking of new ways to use technology in their classrooms. iv. **Reorientation:** At this level, teachers begin to rethink the educational goals of the classroom with the use of technology.	Welliver's Instructional Transformation Model sets goals and expectations for all teachers at whatever stage they are starting at. The five hierarchical stages, which have been explained below, start with familiarization, then utilization, integration, reorientation and finally revolution. ([www.welliversinstructional mo del.com](www.welliversinstructionalmodel.com), published 8th June, 2011, retrieved 8th April, 2022) i. **Familiarization:** This is when teachers become aware of technology and its potential uses. ii. **Utilization:** This is where teachers use technology, but minor problems will cause them to discontinue its use. iii. **Integration:** Here, technology becomes essential for the educational process and teachers are constantly thinking of new ways to use technology in their classrooms. iv. **Reorientation:** At this level, teachers begin to rethink the educational goals of the classroom with the use of technology.	

	v. **Revolution:** This is the highest level where the evolving classroom becomes completely integrated with technology in all subject areas. Technology becomes an invisible tool that is seamlessly woven into the teaching and learning process. LO 1: Demonstrate the use of basic ICT tools for planning lessons (NTS 3a, 3c). LI 1.1 Mention and describe at least three basic ICT tools that can be used in planning a lesson. LI 1.2 Perform basic lesson planning tasks using an ICT tool. LO 2: Demonstrate knowledge of the basic ICT tools and their impact on teaching and learning (NTS 3g, 3h, 3j, 3n, 3k, and 3p). LI 2.1 Mention and describe at least three basic ICT tools and how to use them in teaching and learning.	v. **Revolution:** This is the highest level where the evolving classroom becomes completely integrated with technology in all subject areas. Technology becomes an invisible tool that is seamlessly woven into the teaching and learning process. LO 1: Demonstrate the use of basic ICT tools for planning lessons (NTS 3a, 3c). LI 1.1 Mention and describe at least three basic ICT tools that can be used in planning a lesson. LI 1.2 Perform basic lesson planning tasks using an ICT tool. LO 2: Demonstrate knowledge of the basic ICT tools and their impact on teaching and learning (NTS 3g, 3h, 3j, 3n, 3k, and 3p). LI 2.1 Mention and describe at least three basic ICT tools and how to use them in teaching and learning.	

	LI 2.2 Analyse and evaluate the impact of ICT on teaching and learning. LO 3: Demonstrate the use of basic ICT tools in assessment (NTS 3j, 3k). LI 3.1 Mention and describe at least three basic ICT tools that can be used to assess both teaching and learning. LI 3.2 Perform lesson assessment tasks using ICT tools. LO 4: Demonstrate understanding of how ICT tools enhance the quality of research activities (NTS 3b). LI 4.1 List at least four ICT tools used in research. LI 4.2 Perform basic research tasks using ICT tools. 1.4 Ask teachers to mention at least three basic ICT tools and what they are used for. *E.g.* a) *Desktop Computers (Preparation of document, editing, etc.)* b) *Laptops (preparation and presentation, etc.)* c) *Calculators (mathematical and scientific analysis, etc.)* d) *Projectors (Presentations, etc.)* e) *Printers (Printing and photocopying of documents, etc.)* f) *Browsers (e.g., Firefox, google chrome, opera-mini, Microsoft edge, for online search), etc.*	LI 2.2 Analyse and evaluate the impact of ICT on teaching and learning. LO 3: Demonstrate the use of basic ICT tools in assessment (NTS 3j, 3k). LI 3.1 Mention and describe at least three basic ICT tools that can be used to assess both teaching and learning. LI 3.2 Perform lesson assessment using an ICT tool. LO 4: Demonstrate understanding of how ICT tools enhance the quality of research activities (NTS 3b). LI 4.1 List at least four ICT tools used in research. LI 4.2 Perform basic research tasks using ICT tools. 1.4 Mention at least three basic ICT tools and what they are used for. *E.g.* *Desktop Computers (Preparation of document, editing, etc.)*	

| | | 1.5 Ask teachers to distinguish between computer software and hardware by mentioning at least two of each.

Software
E.g.
  a) *Office Professional – E.g. XP*
  b) *Good photo software e.g. Microsoft Digital Photo Suite*
  c) *"Photostory 2 -- comes with service pack 2*
  d) *Inspiration*
  e) *Smart Notebook*
  f) *United Streaming subscriptio*n, etc.

Hardware
E.g.
  a) *Flat Screen monitor*
  b) *Printer. e.g., HP*
  c) *CD/DVD RW drive(s)*
  d) *USB ports*
  e) *Scanner – e.g., Epson brand*
  f) *Digital camera – e.g. Canon*
  g) *External storage - an external hard drive to back up data*
  h) *Portable storage - USB flash drive, 2 GB minimum.*
  i) *Palm or other handheld devices to keep schedules, dates, reminders, and store pictures and music. E.g. Tungsten Palm*
  j) *Smart board or Smart airliner, with projection unit for classroom use.*
  k) *Classroom Performance System (CPS) also for classroom use, etc.* | 1.5 Distinguish between computer hardware and software by mentioning at least two of each.

Software
E.g.
  Office Professional – e.g., XP, etc.

Hardware
E.g.
  Flat Screen monitor, etc. | |

	1.6 Ask teachers in groups to share their views about how to create, edit, format, save and print documents using various productivity tools. *E.g.* *Creating a new page in Word, PowerPoint, Excel, etc.* *Editing a document using track changes* *Saving a document using "save as" or clicking on the 'save' icon Printing only odd pages of a document* *Printing a document on both sides of a sheet of paper, etc.*	1.6 Share your views about how to create, edit, format, save and print documents using various productivity tools. *E.g.* *Saving a document using "save as" or clicking on the 'save' icon, etc.* *.*	
	1.7 Ask teachers who are conversant with and have utilized ICT tool(s) in their lessons to share their experiences of the integration and impact of ICT tools in their teaching (NTS 3j). *E.g.* a) *Open Educational Resources (OERs) i.e. open courseware, learning models, streaming videos, online tutorials, open access journals, digital learning objects all improve lesson presentations and make them more interesting* b) *The use of projector and laptops for lesson presentation saves time for writing on the board and extends quality time on activities to enhance learning*	1.7 Share your experiences of the integration and impact of ICT tools in your teaching. *E.g.* *Open Educational Resources (OERs) i.e., open courseware, learning models, streaming videos, online tutorials, open access journals, digital learning objects all improve lesson presentations and make them more interesting, etc.*	

	c) *Digital learning materials, e.g., e-textbooks, e-workbooks, e-tests and educational videos all help in improving understanding of lessons, etc.*		
	1.8 Ask teachers in groups to share their views on using specific ICT tools to search for teaching, learning and assessment activities. *E.g.* *a) Ai. Google – provides education on artificial intelligence* *b) Academia.edu – provides access to academic papers* *c) Edulastic – provides access to interactive formative assessment activities* *d) YouTube videos* *e) Google Forms – used in surveys and can analyse results in real time* *f) Survey monkey – used to conduct online surveys, etc.*	1.8 In groups, share your views on using specific ICT tools to search for teaching, learning and assessment activities *E.g.* *Using electronic grading rubric – a guide for assessing work manually or electronically, etc.*	
Overcoming misconceptions, stereotypes, negative perceptions about ICT	1.9 Ask teachers to work in pairs to discuss misconceptions and stereotypes in teaching and learning with ICT tool(s) and share ideas on how to	1.9 In pairs, discuss misconceptions in teaching and learning with ICT tool (s) and share possible ways of addressing them.	10 mins

	address them. *E.g.* *a) Computers can do everything a teacher can do. This is a misconception which must be addressed by finding examples of what teachers can do but computers cannot do- i.e.,* *teachers take into consideration students' feelings when teaching them* *b) ICT is meant for male learners. This misconception can be addressed by creating awareness that this is not true, thus, invite a female ICT expert to have a talk with both teachers and students.* *c) ICT mediated education results in unequal access to quality education. This negative perception can be addressed by providing offline versions of online tasks, etc.* 1.10 Ask teachers to outline possible challenging areas in teaching with ICT tool(s) taking into consideration GESI. *E.g.* *a) Identifying areas in the curriculum where GESI stereotypes are reinforced through ICT. An example is where male learners tend to dominate computer use in the classroom. Teachers should ensure equitable access to*	*E.g.* *Computers can do everything a teacher can do. This is a misconception which must be addressed by finding examples of what teachers can do but computers cannot do- i.e.,* *teachers take into consideration students' feelings when teaching them, etc.* 1.10 Outline possible challenging areas in teaching with ICT tool(s) taking into consideration GESI. *E.g.* *Identifying areas in the curriculum where GESI stereotypes are reinforced through ICT. An example is where male learners tend to dominate computer use in the classroom. Teachers should ensure equitable access to*	

	computer use in the classroom.	computer use in the classroom, etc.	
	b) Some learners copy verbatim essays from the Internet and present them as their own work. Teachers may be able to detect this with the appropriate plagiarism tools		
	Some learners have no access to ICT devices so they are not able to complete assignments that require the use of such devices. Using group assignments can encourage collaborative work and sharing of ICT devices, etc.		

2. Planning for teaching, learning and assessment activities for the lesson/s making links to the secondary school curriculum	2.1 Ask teachers in groups share their views on how to plan lessons using ICT tools. *E.g.* *In planning a lesson, a teacher will need electronic devices and other resources to develop structured learning activities:* a) *Printer/photocopier, printed task sheets, links to videos, slides, memory stick, calculator* b) *Different presentation modes – PowerPoint presentation, projecting electronic diagrams and charts, audio recorded tasks* c) *Different assessment methods – completing task sheets, using printed mark schemes for self and peer assessment, answering audio recorded questions, using calculators to check answers* d) *Using printed task sheets in groupwork to develop communication and collaboration skills, problem solving skills, etc.*	2.1 In groups, share your views on how to plan lessons using ICT tools. *E.g.* *In planning a lesson, a teacher will need electronic devices and other resources to develop structured learning activities:* *Printer/photocopier, printed task sheets, links to videos, slides, memory stick, calculator, etc.*	20 mins
	2.2. Ask teachers discuss general ICT tools/Apps for planning teaching and learning and ask them to give examples of how they are used. *E.g.* *Desktop and laptop computers (used to write lesson plans and*	2.2 Discuss general ICT tools for teaching and learning. *E.g.* *Desktop and laptop computers (used to write lesson plans and*	

		develop teaching and learning materials), projector, digital cameras, printer, photocopier, tablets, popplet, pen drive, ipods, ipads, webboards, scanners, microphones, interactive white board, DVDs and CDs flash discs, video games, etc. Other examples are: Geomaths, Maths kids, Microsoft maths solver, Photomaths, Scratch, Kasahorow, Soundsright, Coral draw, Photoshop Autocard, Paint, Sunflower Remote Sensing and Geographic Information System, Telegram, WhatsApp, Encyclopaedia Britannica Microsoft Encarta, Recipe App, etc.	*develop teaching and learning materials), projector, digital cameras, etc.*	
		2.3. Ask teachers to discuss the appropriate ICT tools to support students with Special Education Needs (SEN) when planning teaching, learning and assessment (NTS 3f, 3o). *E.g. Teachers dealing with the SEN will require special ICT tools like; text magnifier, head wands, keyboard for cerebral palsy, braille, typing aids, large prints, audio books, etc.*	2.3. Discuss the appropriate ICT tools to support students with Special Education Needs (SEN) during teaching, learning and assessment (NTS, 3f, 3o). *E.g. Teachers dealing with the SEN will require special ICT tools like; text magnifier, head wands, etc.*	
3.	**Teaching, learning and assessment** ▸ **Noting opportunities for making explicit links to the Secondary /Technical**	3.1. Ask teachers to identify at least two possible gaps in the use of ICT tools in their lesson delivery and discuss possible ways of addressing them. *E.g.* a) *Possible gap: Some teachers may not be IT literate Possible solution: Designing ICT training packages to equip*	3.1. Identify at least two possible gaps in the use of ICT tools in your lesson delivery and discuss possible ways of addressing them. *E.g.* *Possible gap: Some teachers may not be IT literate Possible solution:*	20mins

Vocational Curriculum ▶ **Noting opportunities for integrating: GESI & SEL responsiveness and ICT and 21st C skills**	*teachers with the necessary knowledge and skills in using ICT tools in lesson delivery* b) *Possible gap: unavailability of ICT tools or resources for teachers to use in their lesson delivery. Possible solution: Provision of the ICT tools and resources in the various schools to improve teaching and learning* c) *Possible gap: lack of teachers' confidence to use ICT tools in teaching and learning Possible solution: introduce capacity-building training for teachers in the use of ICT tools in teaching and learning, etc.*	*Designing ICT training packages to equip teachers with the necessary knowledge and skills in using ICT tools in lesson delivery*	
	3.2 Ask teachers to discuss in their subject groups and come out with at least three strategies on how ICT can be integrated in their specific subject areas (NTS 3i, 3j). **(EXTENSION ACTIVITY)** *E.g.* a) *The use of computer simulation in science teaching presentations* b) *In mathematics, Excel spreadsheet can be used to present data and draw charts* c) *The use of computers and ICT applications such as coral draw and publisher to teach TVET students.*	3.2 Discuss in your subject groups and come out with at least three strategies on how ICT can be integrated in your specific subject areas (NTS 3i, 3j). **(EXTENSION ACTIVITY)** *E.g.* *The use of computer simulation in science teaching presentations, etc.*	

	d) *The use of window-eye, Jon Access With Speech (JAWS), TOBII Eye Tracking System, Non-Visual Desktop Access (NVDA) in teaching students who are visually impaired.*		
	e) *Other sources: Smart phones, calculators, projectors, Office 365 vs G-Suite for education, Google Meet for online teaching, Google Classroom for online teaching and learning, etc.*		
	3.3 Ask teachers to discuss at least two possible strategies that use ICT tools in a GESI and SEL responsive manner in a teaching context. *E.g.* a) *Giving all learners including SEN equal access to computers.* b) *Considering GESI responsive seating arrangement when delivering lessons using ICT by ensuring that learners with visual or hearing impairment are seated short distances for the screen* c) *Providing other ICT tools such as window-eye, Jon Access With Speech (JAWS), TOBII Eye Tracking System, etc., to support learners who are visually impaired, etc.* d) *Providing visually impaired learners with*	3.3 Discuss at least two possible strategies that use ICT tools in a GESI and SEL responsive manner to develop these skills in learners. *E.g.* *Giving all learners including SEN equal access to computers, etc.*	

	large prints of text e) *Providing importunities for self- assessment and reflection, etc* 3.4 Ask teachers to mention at least three 21st century skills and ICT tools that can be integrated during teaching and learning to develop these skills in learners. *E.g.* a) *Building communication skills with the use of ICT tools such as computers, projectors, etc., to do PowerPoint presentation.* b) *Building collaborative skills through the use of electronic media (e.g., group activities through the use of WhatsApp)* c) *Enhancing research capabilities or skills through the use of internet search engines such as Google Chrome, Firefox browsers, etc.* d) *Improving creativity skills through the use of YouTube videos, etc.* e) *The following links can be used to access information on 21st century skills:* i. **Collaborative problem solving** *https://youtu.be/cnkK HL _dyGE* ii. **Creativity** *https://www.youtube .co*	3.4 Mention at least three 21st century skills and ICT tools that can be integrated during teaching and learning to develop these skills in learners. *E.g.* *Building communication skills with the use of ICT tools such as computers, projectors, etc., to do PowerPoint presentation.* *E.g.* *The following links can be used to access information on 21st century skills:* i. **Collaborative problem solving** *https://youtu.be/cnk KH L_dyGE* ii. **Creativity** *https://www.youtub e.c*	

	m/watch?v=qV7DiTFd tv w	*om/watch?v=qV7Di TFd tvw*	
	iii. **Hands-on learning** *https://youtu.be/vYU NfJ 9lKzs*	iii. **Effective written and oral communication** *https://www.youtub e.c om/watch?v=D5hM N XkPQA*	
	iv. **Effective written and oral communication** *https://www.youtube .co m/watch?v=D5hMN_ Xk PQA*	iv. **Information and media literacy** *https://youtu.be/bjY hm TC3lrc*	
	v. **Ethical decision making** *https://youtu.be/Iwk 8d GFn1tY*	v. **Critical thinking** *https://youtu.be/y7i ME H7jGFk* *https://youtu.be/88 Do GrqEuJk*	
	vi. **Information and media literacy** *https://youtu.be/bjY hm TC3lrc*	vi. **Leadership** *https://youtu.be/- NF10F6bX_ g*	
	vii. **Critical thinking** *https://youtu.be/y7i ME H7jGFk* *https://youtu.be/88D oG rqEuJk*	vii. **Personal responsibility and initiative** *https://youtu.be/nR E13 1ErclM*3.5	
	viii. **Leadership** *https://youtu.be/- NF10F6bX*		
	ix. **Personal responsibility and initiative** *https://youtu.be/nRE1 3 1ErclM, etc*		

		3.5 Ask teachers to discuss in groups how to assess learning using ICT tools. *E.g.* a) *Using electronic grading rubric – a guide for assessing work manually or electronically* b) *Canvas assignments – e.g., quizzes, submitted online* c) *Plagiarism detection – used to check how original a piece of work is* d) *QuizBot – creating quizzes and sharing them with others online* e) *ClassMarker – for online testing* f) *Assessing learning using social media platforms* g) *Zoom/Teams interviews*	3.5 Discuss in groups how to assess learning using ICT tools. *E.g.* *Using electronic grading rubric – a guide for assessing work manually or electronically*	
		3.6 In subject groups, ask teachers to come out with at least four possible assessment tools in ICT to support them in assessing learners. *E.g.* *In English language, tools for checking grammar errors online, tools for checking plagiarism, etc.* *In science, tools will include those for simulating how organs and systems work in the body, etc.*	3.6 In subject groups, come out with at least four possible assessment tools in ICT to support you in assessing learners. *E.g.* *In English language, tools will include those for checking grammar errors online and those for checking plagiarism, etc.*	
		3.7 Ask a teacher to model a teaching activity using any ICT tool(s) of their choice. **(EXTENSION ACTIVITY)**	3.7 Model a teaching activity using any ICT tool(s) of your choice. **(EXTENSION ACTIVITY)**	

4. Evaluation and review of session: ▶ **Identifying and addressing any outstanding issues relating to the lesson/s for clarification** ▶ **Noting that teachers need to identify critical friends to observe lessons and report at next session**	4.1 Ask teachers to identify any outstanding issue(s) relating to the session for clarification. 4.2. Ask teachers to mention at least four ICT tools that can be used in the delivery of their lessons. 4.3 Ask teachers to identify a critical friend who will observe their lesson and give them feedback on how they integrate ICT in the lesson. 4.4 Remind teachers to read session 3 of the PLC Handbook in preparation for the next session. 4.5 Remind teachers to come to the next session (i.e., Session 3) with the **National Teachers' Standard Guidelines for the next PLC sessions**	4.1 Identify any outstanding issue(s) relating to the session for clarification. 4.2 Mention at least four ICT tools that can be used in the delivery of your lessons. 4.3 Identify a critical friend who will observe your lesson and give you feedback on how you integrate ICT in the lesson. 4.4 Remember to read session 3 from the PLC Handbook in preparation for the next session. 4.5 Come to the next session (i.e., Session 3) with the **National Teachers' Standard Guidelines for the next PLC sessions**	10 mins

PLC Session 3: Social and Emotional Learning (SEL)

Focus: the bullet points provide the frame for what is to be done in the session. The writer should use the bullets to guide what they write for the PLC Coordinators and teachers to do or say during each session. Each bullet needs to be addressed	Guidance Notes on Teacher Activity during the PLC Session. *What teachers will do during each stage of the session*	Guidance Notes on Teacher Activity during the PLC Session. *What teachers will do during each stage of the session*	Time in session
1. Introduction	1.1 Start the PLC session by asking teachers to share what they did differently in the classroom or elsewhere based on PLC Session 2, *on Information & Communications Technology*, which they think impacted learning positively. 1.2 Ask teachers to discuss and summarise in a single sentence, why they think what their colleague did by way of application of what they learned in Session 2, *on Information & Communications Technology*, supported learning.	1.1 Share what you did differently in the classroom or elsewhere based on PLC Session 2, on *Information & Communications Technology,* which you think impacted learning positively. 1.2 Discuss and summarise in a single sentence, why you think what your colleague did by way of application of what you learned in Session 2, on *Information & Communications Technology*, supported learning.	20 mins

2. Planning for teaching, learning and assessment activities, making links with the Pre-Tertiary (standards-based) Curriculum and using GESI, SEL, ICT and 21st century skills	2.1 Ask a teacher to read the purpose, introduction to Social and Emotional Learning (SEL), the Learning Outcomes (LOs) and Learning Indicators (LIs) for the session.
	
	Purpose:
	The purpose of the session is to guide teachers to;
	   a) have a clear understanding of SEL competencies
		2.1 Read the purpose, introduction to Social and Emotional Learning (SEL), the Learning Outcomes (LOs) and Learning Indicators (LIs) for the session.
		
		Purpose:
		The purpose of the session is to guide teachers to;
		   a) have a clear understanding of SEL competencies
			30 mins

	b) take SEL competencies into account in the teaching and learning process c) implement SEL in other aspects of school life d) engage teachers on how to encourage learners to take SEL into account in their learning.	b) take SEL competencies into account in the teaching and learning process c) implement SEL in other aspects of school life d) engage teachers on how to encourage learners to take SEL into account in their learning.	

Introduction to SEL:
Social and emotional learning refers to the process through which learners learn to understand and manage emotions; set and achieve positive goals; feel and show empathy for others; establish and maintain positive relationships; and make responsible decisions (Weissberg, *et al.*, 2015). Teaching involves addressing learners' emotional, social and behavioural needs. With the right support, learners learn to articulate and manage their own emotions. They are able to deal with conflict and solve problems if they are given the appropriate guidance. Also, learners are able to understand things from other people's perspective and communicate in appropriate ways if teachers make a deliberate effort to encourage them to do so.
These social and emotional skills are essential for learners' development. They support effective learning and are linked to positive outcomes in later life. Social and emotional learning can enhance mental health and well-being, positive

Introduction to SEL:
Social and emotional learning refers to the process through which learners learn to understand and manage emotions; set and achieve positive goals; feel and show empathy for others; establish and maintain positive relationships; and make responsible decisions (Weissberg, *et al.*, 2015). Teaching involves addressing learners' emotional, social and behavioural needs. With the right support, learners learn to articulate and manage their own emotions. They are able to deal with conflict and solve problems if they are given the appropriate guidance. Also, learners are able to understand things from other people's perspective and communicate in appropriate ways if teachers make a deliberate effort to encourage them to do so.
These social and emotional skills are essential for learners' development. They support effective learning and are linked to positive outcomes in later life. Social and emotional learning can

	learner behaviour and academic performance.	enhance mental health and well-being, positive learner behaviour and academic performance.
	LO 1: Demonstrate knowledge and understanding of concepts related to SEL (NTS 2e, 2f, 3c, 3d, 3f, 3g and 3k).	LO 1: Demonstrate knowledge and understanding of concepts related to SEL (NTS 2e, 2f, 3c, 3d, 3f, 3g and 3k).
	LI 1.1 Explain the term SEL.	LI 1.1 Explain the term SEL.
	LI 1.2 List and explain at least three competencies associated with SEL.	LI 1.2 List and explain at least three competencies associated with SEL.
	LO 2: Demonstrate knowledge, understanding and application of SEL across the SHS/TVET curriculum (NTS 2e, 2f, 3c, 3d, 3f, 3g and 3k).	LO 2: Demonstrate knowledge, understanding and application of SEL across the SHS/TVET curriculum (NTS 2e, 2f, 3c, 3d, 3f, 3g and 3k).
	LI 2.1 Mention and explain at least two benefits of SEL competencies.	LI 2.1 Mention and explain at least two benefits of SEL competencies.
	LI 2.2 Discuss how to promote SEL competencies in the school environment including the classroom.	LI 2.2 Discuss how to promote SEL competencies in the school environment including the classroom.
	2.2 Ask teachers in pairs/groups to explain the term SEL in their own words (NTS 2c, 2e).	2.2 In pairs/groups, explain the term SEL in your own words (NTS 2c, 2e).
	Note: *Refer to the introduction*	
	2.3 Ask teachers to list and explain at least three competencies associated with SEL (NTS 2e, 2f). *E.g.* a) *Self-awareness: Ability to consider and understand one's emotions, thoughts, values and experiences, and how these can influence one's actions*	2.3 List and explain at least three competencies associated with SEL (NTS 2e, 2f). *E.g.* *Self-awareness: Ability to consider and understand one's emotions, thoughts, values and experiences, and how these can influence one's actions,*

	b) *Self-management: Ability to regulate and control one's emotions, thoughts and behaviours* c) *Responsible decision making: Ability to make positive and constructive choices based on ethical standards, safety concerns and social norms* d) *Social awareness: Ability to empathise with others and treat them fairly* e) *Relationship skills: Ability to make positive connections with others, taking their emotions into account, etc.*	*etc.*	

	2.4 Ask teachers in pairs/groups to mention and explain at least two benefits of any of the competencies of SEL (NTS 2e, 2f, 3c, 3f, 3g, 3k and 3l).
	E. g.
	a) *Self-awareness:*
	   i. *Helps to identify one's strengths and limitations*
	   ii. *Improves self-management and decision making*
	b) *Self-management:*
	   i. *Helps to control one's impulses*
	   ii. *Helps one to set goals and cultivate self-discipline*
	c) *Responsible decision making:*
	   Helps one to make positive choices and avoid negative ones
	d) *Social awareness:*
	   Helps one to establish and maintain healthy relationships and social interactions
		2.4 In pairs/groups, mention and explain at least two benefits of any of the competencies of SEL (NTS 2e, 2f, 3c, 3f, 3g, 3k and 3l).
		
		E.g.
		   Self-awareness:
		   Helps to identify one's strengths and limitations, etc.	

	e) Relationship skills: *Helps one to establish and maintain healthy, mutually rewarding relationships, etc.*	

	2.5 Ask teachers to discuss how they will promote SEL competencies in their classroom and the school as a whole (NTS 3c).
	E. g.
	a) Self-awareness: Expand learners' emotional vocabulary and support them to express emotions
	b) Self-management:
	  i. Encourage learners to use self-calming strategies and positive self-talk to help deal with intense emotions
	  ii. Model the social and emotional behaviour you want learners to emulate
	c) Social awareness:
	  i. Use stories to discuss others' emotions and perspectives
	  ii. Give specific and focused praise when learners display SEL skills
	d) Relationship skills: Role play good communication and listening skills
	e) Responsible decision-making:
	  i. Get learners to practise problem solving strategies
	  ii. Embed SEL in teaching across a range of subject areas (literacy, history, drama and PE), etc.
		2.5 Discuss how you will promote SEL competencies in your classroom and the school as a whole (NTS 3c).
		
		E.g.
		Self-awareness: Expand learners' emotional vocabulary and support them to express emotions, etc.	

	2.6 Ask teachers to reflect individually, share their ideas with a colleague and then with the larger group (i.e. think-pair-share) to identify possible	2.6 Reflect individually, share your ideas with a colleague and then with the larger group (i.e. think-pair share) possible barriers to applying	

	barriers to applying concepts of SEL to teaching and learning and how to address them (NTS 2f, 3m).
	
	E.g.
	    Misconceptions:
	a) *Many people think that reserved and shy learners are academically weak*
	
	    To address this, teachers can use whole-class dialogue, questions, think-pair-share in their lessons which will encourage reserved learners to participate fully in lessons
	
	b) *Friendship between boys and girls in school is misconstrued as sexual relationship*
	
	    To address this, learners should be educated on healthy gender relationships, etc.
	
	2.7 Ask teachers to identify at least four ways of making assessment SEL responsive (NTS 3k, 3n - 3p).
	E.g.
	a) *Provide constructive feedback to all learners*
	b) *Give male and female learners equal opportunity to ask and answer questions*
	c) *Use self and peer assessment activities*
	d) *Use differentiated assessment to cater for different learning needs of learners*
	e) *Respect and appreciate learners' feedback, etc.*
		concepts of SEL to teaching and learning and how to address them (NTS 2f, 3m).
		
		E.g.
		    Misconception:
		    Many people think that reserved and shy learners are academically weak, etc.
		
		    To address this, teachers can use whole-class dialogue, questions, think-pair-share in their lesson which will encourage reserved learners to participate fully in lessons, etc.
		
		2.7 Identify at least four ways of making assessment SEL responsive (NTS 3k, 3n - 3p).
		E.g.
		    Provide constructive feedback to all learners, etc.	

	2.8 Ask teachers to write and share at least four SEL responsive practices that can help make the learning environment conducive and non-threatening (NTS 3a -3c, 3e - 3g).	2.8 Write and share at least four SEL responsive practices that can help make the learning environment conducive and non-threatening (NTS 3a -3c, 3e - 3g).	
	E.g.	*E.g.*	
	a) *Provide suitable seating arrangement to meet all types of learners' needs*	*Provide suitable seating arrangements to meet all types of learners' needs, etc.*	
	b) *Avoid negative expressions or language that can demean or exclude learners*		
	c) *Avoid labelling learners based on their background and physical appearance*		
	d) *Assign roles fairly to all learners*		
	e) *Respect learners' views at all times*		
	f) *Identify/call learners by their official names*		
	g) *Provide psychological safety that makes the learning environment non-threatening, etc.*		
	Refer to the sample lesson plan in social studies below	*Refer to the sample lesson plan in social studies below.*	
	Sample lesson plan based on Social Studies SHS Three 2010 Syllabus	*Sample lesson plan based on Social Studies SHS Three 2010 Syllabus*	
	a) *Topic: Environmental challenges*	a) *Topic: Environmental challenges*	
	b) *Sub-Topic: Environmental degradation*	b) *Sub-Topic: Environmental degradation*	
	c) *Objectives:*	c) *Objectives:*	
	By the end of the lesson, the learner will be able to:	*By the end of the lesson, the learner will be able to:*	
	i. *Describe at least three activities that degrade the environment*	i. *Describe at least three activities that degrade the environment*	
	ii. *Describe at least three effects of degradational activities on human life*	ii. *Describe at least three effects of degradational activities on human life*	
	iii. *Identify at least three steps that can be taken to*	iii. *Identify at least three steps that can be taken*	

	reduce environmental degradation	to reduce environmental degradation	
	d) Teaching and Learning Resources (TLRs): Computer, projector, pictures, flipcharts/cardboards etc.	d) Teaching and Learning Resources (TLRs): Computer, projector, pictures, flipcharts/cardboards etc.	
	e) Relevant Previous Knowledge (RPK): Learners can mention the components of the environment.	e) Relevant Previous Knowledge (RPK): Learners can mention the components of the environment.	

	f) Introduction:
	   i. Ask learners to count the number of colleagues in the class from wherever they sit in the classroom and write the number down. Call some of the learners to tell you any number they like between one and the number they have written down. For each number that a learner mentions, refer to your class list and mention the name of the learner that corresponds to that number and ask the learner who chose that number to say something positive about the colleague whose name was mentioned.
		f) Introduction:
		   i. Ask learners to count the number of colleagues in the class from wherever they sit in the classroom and write the number down. Call some of the learners to tell you any number they like between one and the number they have written down. For each number that a learner mentions, refer to your class list and mention the name of the learner that corresponds to that number and ask the learner who chose that number to say something positive about the colleague whose name was mentioned.	

	ii. In an all-inclusive class discussion, guide learners to mention the components of the environment. Make conscious effort to encourage those who are reserved to contribute to the discussion.	ii. In an all-inclusive class discussion, guide learners to mention the components of the environment. Make conscious effort to encourage those who are reserved to contribute to the discussion.	
	g) Task/Activities:	g) Task/Activities:	

		i. Ask learners to form mixed-gender/mixed-ability groups of three to five learners (consider class size). In each group let them elect a leader and a secretary. Show PowerPoint slides of some activities that degrade the environment for them to observe and discuss. Call each group to pick any of the activities and describe how it contributes to environmental degradation. Provide appropriate measure of praise for effort.	i. Ask learners to form mixed-gender/mixed-ability groups of three to five learners (consider class size). In each group let them elect a leader and a secretary. Show PowerPoint slides of some activities that degrade the environment for them to observe and discuss. Call each group to pick any of the activities and describe how it contributes to environmental degradation. Provide appropriate measure of praise for effort.	
		ii. Guide learners in groups to discuss the effects of environmental degradation. Each group should be given a flip-chart /card board to write their findings and appoint among themselves one to present their points in class.	ii. Guide learners in groups to discuss the effects of environmental degradation. Each group should be given a flip-chart /card board to write their findings and appoint among themselves one to present their points in class.	
		iii. Ask learners in groups to identify themselves as political parties with their own names (Let them use non-existent names). Let them discuss and prepare a manifesto on steps that they would take to reduce the degradation of the environment if they are elected. Move round the groups to encourage and support them appropriately.	iii. Ask learners in groups to identify themselves as political parties with their own names (Let them use non-existent names). Let them discuss and prepare a manifesto on steps that they would take to reduce the degradation of the environment if they are elected. Move round the groups to encourage and support them appropriately.	
		iv. Ask the groups to present their manifestoes using	iv. Ask the groups to present their	

	media as appropriate and ask learners to critique them. Remind learners to be guarded in their comments and intervene to correct unguarded remarks.
	
	h) Core Points:
	  i. Activities that degrade the environment:
	    ➢ Bush burning
	    ➢ Deforestation
	    ➢ Sand winning
	    ➢ Improper mining practices
	    ➢ Improper disposal of refuse
	
	  ii. Effects of environmental degradation:
	    ➢ Diseases
	    ➢ Destruction of plant and animal life
	    ➢ Floods
	    ➢ Occupational and industrial accidents
	    ➢ Global warming
	  iii. Steps to reduce environmental degradation:
	    ➢ Sanctions should be imposed on offenders
	    ➢ Public education
	    ➢ National policy to protect the environment
	    ➢ Appropriate technology usage
	
	i) Core Competencies:
	  i. Digital literacy
	  ii. Problem solving skills
	  iii. Collaboration skills
	  iv. Critical thinking skills
	  v. Personal development
		manifestoes using media as appropriate and ask learners to critique them. Remind learners to be guarded in their comments and intervene to correct unguarded remarks.
		
		h) Core Points:
		  i. Activities that degrade the environment:
		    ➢ Bush burning
		    ➢ Deforestation
		    ➢ Sand winning
		    ➢ Improper mining practices
		    ➢ Improper disposal of refuse
		
		  ii. Effects of environmental degradation:
		    ➢ Diseases
		    ➢ Destruction of plant and animal life
		    ➢ Floods
		    ➢ Occupational and industrial accidents
		    ➢ Global warming
		  iii. Steps to reduce environmental degradation:
		    ➢ Sanctions should be imposed on offenders
		    ➢ Public education
		    ➢ National policy to protect the environment
		    ➢ Appropriate technology usage
		
		i) Core Competencies:
		  i. Digital literacy
		  ii. Problem solving skills
		  iii. Collaboration skills
		  iv. Critical thinking skills	

		v. Personal development	
	j) Conclusion: Review lesson with learners by asking them in their various groups to summarise what they learned. Commend learners for their participation.	j) Conclusion: Review lesson with learners by asking them in their various groups to summarise what they learned. Commend learners for their participation.	
	k) Evaluation:	k) Evaluation:	
	i. Class Exercise	i. Class Exercise	
	➢ Describe at least three activities that degrade the environment	➢ Describe at least three activities that degrade the environment	
	➢ Describe at least three effects of degradational activities on human life	➢ Describe at least three effects of degradational activities on human life	
	➢ Identify at least three steps that can be taken to reduce environmental degradation	➢ Identify at least three steps that can be taken to reduce environmental degradation	
	ii. Assignment: Write an article on the topic "solving environmental degradation problems in my community" for publication in the Junior Graphic.	ii. Assignment: Write an article on the topic "solving environmental degradation problems in my community" for publication in the Junior Graphic.	
	iii. Group Project In your groups, identify an environmental challenge in the school. Plan strategies for solving it, implement the strategy and present your report using varied media at the end of the term.	iii. Group Project In your groups, identify an environmental challenge in the school. Plan strategies for solving it, implement the strategy and present your report using varied media at the end of the term.	
	l) Remarks:	l) Remarks:	

3. Modelling a teaching activity, making links with the Pre-Tertiary (standards-based) Curriculum and using GESI, SEL, ICT and 21st century skills	3.1 Ask teachers to identify in the sample lesson plan, activities that could promote SEL, GESI, ICT, 21st century skills and differentiation (NTS 3c, 3e - 3g). *E.g.* a) *Learners were encouraged to say positive things about their colleagues (SEL, 21st century skills)* b) *Mixed-ability and mixed-gender groups were used in the lesson (GESI/Differentiation)* c) *Teacher used all-inclusive class discussion (GESI/ SEL/21st century skills)* d) *Teacher identified learners by their official names making reference to the class list (SEL)* e) *Conscious effort was made to encourage those who were reserved to contribute to discussions (SEL)* f) *Leaders were elected by learners during group work (21st Century)* g) *PowerPoint were used in presentation (ICT)* h) *Appropriate praises were given to complement learners' efforts (SEL/Differentiation)* i) *Teacher moved around the class to encourage and support all learners (GESI/SEL/ Differentiation)* j) *Learners were reminded to be guarded in their comments while the*	3.1 Identify in the sample lesson plan, activities that could promote SEL, GESI, ICT, 21st century skills and differentiation (NTS 3c, 3e - 3g). *E.g.* *Learners were encouraged to say positive things about their colleagues (SEL, 21st century skills), etc.*	30 mins

	teacher intervened to correct unguarded remarks(SEL)	
	3.2 Ask teachers to recommend other appropriate assessment strategies that are SEL responsive (NTS 1a, 2e, 3f and 3m). *E.g.* a) *Peer assessment* b) *Self-assessment,* c) *Using games* d) *Riddles, etc.*	3.2 Recommend other appropriate assessment strategies that are SEL responsive (NTS 1a, 2e, 3f and 3m). *E.g.* *Peer assessment, etc.*	
	3.3 Ask teachers to suggest two ways in which ICT can be used in promoting SEL during lessons (NTS 3j). *E.g.* a) *Using print material/pictures that depict friendliness, collaboration and inclusiveness* b) *Using YouTube videos that show empathy, support, self-management* c) *Using virtual games that have motivational feedback embedded, etc.*	3.3 Suggest two ways in which ICT can be used in promoting SEL during lessons (NTS 3j). *E.g.* *Using print material/pictures that depict friendliness, collaboration and inclusiveness, etc.*	
	3.4 Ask a teacher to model a teaching activity based on the sample lesson plan that can support learners who may struggle identifying the steps that can be taken to reduce environmental degradation at the appropriate level, taking into consideration SEL, GESI, ICT, 21st century skills and differentiation (NTS 1a, 2c). 3.5 Ask teachers to provide feedback on the lesson delivered (NTS 3n, 3o).	3.4 Model a teaching activity based on the sample lesson plan that can support learners who may struggle identifying the steps that can be taken to reduce environmental degradation at the appropriate level, taking into consideration SEL, GESI, ICT, 21st century skills and differentiation (NTS 1a, 2c). 3.5 Provide feedback on the lesson delivered (NTS 3n, 3o).	

4. Evaluation and review of session: ● **Noting that teachers need to identify colleagues to observe lessons and report at the next session**	4.1 Ask teachers in groups to reflect, write and share what they have learned with the larger group with regard to the concept, benefits and application of SEL in the school environment (NTS 1a, 1b). 4.2 Remind teachers to, where possible, identify a critical friend to observe their lesson and provide feedback to them on how they have used SEL in their lesson (NTS 1a, 3l and 3n). 4.3 Remind teachers to read PLC Session 4 in preparation for the next session.	4.1 In your group, reflect, write and share what you have learned with the larger group with regard to the concept, benefits and application of SEL in the school environment (NTS 1a, 1b). 4.2 Where possible, identify a critical friend to observe your lesson and provide feedback to you on how you have used SEL in your lesson. (NTS 1a, 3l and 3n). 4.3 Read PLC Session 4 in preparation for the next session.	10 mins

PLC Session 4: Introduction to the National Teachers' Standards

	Guidance notes on Leading the session. *What the PLC Coordinator will have to say during each stage of the session*	Guidance Notes on Teacher Activity during the PLC Session. *What teachers will do during each stage of the session.*	Time in session
1. Review of previous session and introduction to new session	1.1 Start the session by asking teachers to share one thing they did differently in the classroom and elsewhere based on the session on *social and emotional learning*, which they think impacted learning positively. 1.2 Ask teachers to discuss and summarise in a single sentence why they think what a colleague did by way of application of lessons learned in the session on *social and emotional learning*, supported learning.	1.1 Share one thing you did differently in the classroom and elsewhere based on the session on *social and emotional learning*, which you think impacted learning positively. 1.2 Discuss and summarise in a single sentence why you think what a colleague did by way of application of lessons learned in the session on *social and emotional learning*, supported learning.	30 mins

NB: The guidance for PLC Coordinator should identify, address, and provide explanations for any areas where teachers might require clarification on an aspect of the lesson. **NB: PLC Coordinator should ask teachers to plan for their teaching as they go through the PLC session**	1.3 Introduce the new session and inform teachers that the session looks at an overview of the National Teachers' Standards (NTS) and that detailed sessions on the various domains will be covered in subsequent sessions. 1.4 Ask a teacher to read the learning outcomes (LOs) and learning indicators (LIs) of the session. LO 1: Demonstrate knowledge and understanding of the domains and sub-domains of the NTS. LI 1.1 State the three domains of the NTS. LI 1.2 State the sub-domains of each domain. LI 1.3 Match the sub-domains to their respective domains.	1.3 Note the information on the session and remember the relationship between Session 3 and the subsequent sessions. 1.4 Read the learning outcomes (LOs) and learning indicators (LIs) of the session. LO 1: Demonstrate knowledge and understanding of the domains and sub-domains of the NTS. LI 1.1 State the three domains of the NTS. LI 1.2 State the sub-domains of each domain. LI 1.3 Match the sub-domains to their respective domains.	

	LO 2: Identify the characteristics of the domains and sub-domains of the NTS. LI 2.1 Discuss the characteristics of the domains. LI 2.2 Draw a diagram to indicate all the domains and their characteristics. LO 3: Demonstrate knowledge and understanding of the philosophy of the NTS and describe its structure and content**.** LI 3.1 State the philosophy of the NTS and list the various documents that inform the philosophy of the NTS. LI 3.2 Explain how the following documents inform the philosophy of the NTS. a) Education Act, 2008 (Act 778) repealed with Education Regulatory Bodies Act, 2020 (Act 1023) b) Pre-tertiary Teacher Professional Development and Management Policy (PTPDM) c) Continental Education Strategy for Africa (CESA) d) Sustainable Development Goals (SDGs). LI 3.3 Discuss the structure of the NTS. LI 3.4 Examine the content of the NTS.	LO 2: Identify the characteristics of the domains and sub-domains of the NTS. LI 2.1 Discuss the characteristics of the domains. LI 2.2 Draw a diagram to indicate all the domains and their characteristics. LO 3: Demonstrate knowledge and understanding of the philosophy of the NTS and describe its structure and content. LI 3.1 State the philosophy of the NTS and list the various documents that inform the philosophy of the NTS. LI 3.2 Explain how the following documents inform the philosophy of the NTS. a) Education Act, 2008 (Act 778) repealed with Education Regulatory Bodies Act, 2020 (Act 1023) b) Pre-tertiary Teacher Professional Development and Management Policy (PTPDM) c) Continental Education Strategy for Africa (CESA) d) Sustainable Development Goals (SDGs). LI 3.3 Discuss the structure of the NTS. LI 3.4 Examine the content of the NTS**.**	

		LO 4: Demonstrate knowledge and understanding of the relevance of cross-cutting issues including Gender Equality and Social Inclusion (GESI), Information and Communications Technology (ICT) and 21st century skills and competencies in the NTS.	LO 4: Demonstrate knowledge and understanding of the relevance of cross-cutting issues including Gender Equality and Social Inclusion (GESI), Information and Communications Technology (ICT) and 21st century skills and competencies in the NTS.	
		LI 4.1 Identify key cross-cutting issues in the NTS.	LI 4.1 Identify key cross-cutting issues in the NTS.	
		LI 4.2 Explain how the cross- cutting issues affect teacher professionalism.	LI 4.2 Explain how the cross- cutting issues affect teacher professionalism.	
		LI 4.3 Share experiences on the cross-cutting issues in the classroom.	LI 4.3 Share experiences on the cross-cutting issues in the classroom.	
		LI 4.4 Identify the relevant GESI responsive and ICT resources for teaching and learning.	LI 4.4 Identify the relevant GESI responsive and ICT resources for teaching and learning.	
		LO 5: Analyse how the NTS can guide the planning, teaching and assessment of lessons in secondary schools.	LO 5: Analyse how the NTS can guide the planning, teaching and assessment of lessons in secondary schools.	
		LI 5.1 Give examples of how to take cognizance of diverse learners' backgrounds in planning and teaching.	LI 5.1 Give examples of how to take cognizance of diverse learners' backgrounds in planning and teaching.	
		LI 5.2 Give examples of varied teaching methods that can address the learning need of learners with different backgrounds.	LI 5.2 Give examples of varied teaching methods that can address the learning need of learners with different backgrounds.	
		LI 5.3 Integrate a variety of assessments modes into teaching to support learning.	LI 5.3 Integrate a variety of assessments modes into teaching to support learning.	
		LI 6.3 Use assessment data to improve teaching and learning.	LI 6.3 Use assessment data to improve teaching and learning.	

Give regard for the domains and subdomains of the NTS, etc.	1.5 Ask teachers in groups to discuss what they know about the NTS. *E.g.* *a) The Standards describe values, attitudes, what teachers should know and be able to do, and use these to support the on-going development of teachers.* *b) The Standards also set out the minimum levels of practice that all trained teachers must reach by the end of their pre-service teacher education course in order to play a critical role learner development.*	1.5 Discuss what you know about the NTS. *E.g.* *The Standards describe values, attitudes, what teachers should know and be able to do, and use these to support the on-going development of teachers.*	10 mins
	1.6 Ask one teacher to read the table of contents of the NTS (Refer to NTS Guidelines, n.d., p. 4).	1.6 Read the Table of Contents of the NTS (Refer to NTS Guidelines, n.d., p. 4).	
	1.7 Ask teachers in groups to discuss the following and share their findings with the larger group. a) What do the Standards stand for? (Refer to In-service NTS Guidelines, n.d., p. 6). b) Who are the Standards for? (Refer to In-service NTS Guidelines, n.d., p. 8). c) How were the Standards developed? (Refer to In-service NTS Guidelines, n.d., p. 9). d) What is the legal status of the Standards? (Refer to In-service NTS Guidelines, n.d., p. 10). e) What philosophy underpins the Standards?	1.7 Discuss the following in groups and share your findings with the larger group. a) What do the Standards stand for? (Refer to In-service NTS Guidelines, n.d., p. 6). b) Who are the Standards for? (Refer to In-service NTS Guidelines, n.d., p. 8). c) How were the Standards developed? (Refer to In-service NTS Guidelines, n.d., p. 9). d) What is the legal status of the teachers' Standards? (Refer to In-service NTS Guidelines, n.d., p. 10). e) What philosophy underpins the Standards?	

	(Refer to In-service NTS Guidelines, n.d., p. 11).	(Refer to In-service NTS Guidelines, n.d., p. 11).	
	1.8 Ask teachers to identify the Domains and the Sub-Domains of the NTS. (Refer to In-service NTS Guidelines, n.d., pp. 12-15) ***Note:*** *The Domains are:* *a) Professional Values and Attitudes* *b) Professional Knowledge* *c) Professional Practice* *The sub-domains are:* ▶ *Professional development* ▶ *Community of practice **(Under Professional Values and Attitudes)*** ▶ *Knowledge of educational framework and curriculum* ▶ *Knowledge of learners **(Under Professional Knowledge)*** ▶ *Managing the learning environment* ▶ *Teaching and learning* ▶ *Assessment* **(*Under Professional Practice)***	1.8 Identify the Domains and the Sub-Domains. (Refer to In-service NTS Guidelines, n.d., pp. 12-15).	
	1.9 Ask teachers to think-pair- share on how the Standards are to be used and the roles of Teacher Education Institutions. (Refer to In-service NTS Guidelines, n.d., pp. 16-17).	1.9 Think-pair-share on how the Standards are to be used and the role of Teacher Education Institutions. (Refer to In-service NTS Guidelines, n.d., pp. 16- 17).	
	1.10 In groups, ask teachers to discuss the format of the Standards.	1.10 Discuss the format of the Standards in your groups. (Refer to In-service	

	(Refer to In-service NTS Guidelines, n.d., pp. 19-32). 1.11 Ask teachers to identify and discuss the evidence that a teacher has met or can meet the Standards at the appropriate level by looking at the teacher's professional portfolio. (Refer to In-service NTS Guidelines, n.d., pp. 34-35).	NTS Guidelines, n.d., pp. 19-32). 1.11 Identify and discuss the evidence that a teacher has met or can meet the Standards at the appropriate level by looking at the teacher's professional portfolio. (Refer to In-service NTS Guidelines, n.d., pp. 34-35).	
	Evidence criteria: *E.g.* a) *Assignment* b) *Examination Results* c) *Lecture Notes* d) *Lesson Plan* e) *Study Notes* f) *Assessment Records* g) *Publications* h) *Testimonials, etc.* 1.12 Ask teachers to identify and discuss the competency requirements of the various ranks in the Ghana Education Service. (Refer to In-service NTS Guidelines, n.d., pp. 38-39).	*Evidence criteria:* *E.g.* *Assignment, etc* 1.12 Identify and discuss the competency requirements of the various ranks in the Ghana Education Service. (Refer to In-service NTS Guidelines, n.d., pp. 38-39).	
2. Planning for teaching, learning and assessment activities for the lesson/s making links to the secondary school curriculum	2.1 Ask teachers in groups to think-square- share and prepare an outline of a lesson plan that can be used to teach a lesson to the NTS in a particular subject in any class (NTS 3a). *E.g., Sample lesson plan in Social Studies:* *Refer to Social Studies Teaching syllabus 2010 Year 1.* *An example of an outline plan for teaching based on the 2010 SHS Social Studies*	2.1. Think-square-share and prepare an outline of a lesson plan that can be used to teach a lesson to the NTS in a particular subject in any class (NTS 3a). *E.g., Sample lesson plan in Social Studies:* *Refer to Social Studies Teaching syllabus 2010 Year 1.* *An example of an outline plan for teaching based on the 2010 SHS Social Studies Syllabus*.*	20 mins

		Syllabus*.	

		a) *Topic: Self Identity*
		 b) *Sub-topic: Actions of False Identity*
		 c) *Objectives: By the end of the lesson the learner will be able to:*
		   i. *Explain the term self*
		   ii. *Identify at least two actions of false identity and their related problems*
		 d) *Relevant previous knowledge: Students know themselves.*
		 e) *Introduction: Ask students to describe themselves.*
		 f) *Tasks/activities:*
		   i. *Discuss with learners, the concept of **self** in relation to their capabilities.*
		   ii. *Group learners to identify actions of false identity and their related problems.*
		 g) *Core points:*
		   i. *Self is the whole being of an individual, taking into consideration their personal and psychological nature and abilities.*
		   ii. *Some students pretend to be what they are not, e.g. they want to show off that they come from well to do families while it is not the case.*
			a) *Topic: Self Identity*
			 b) *Sub-topic: Actions of False Identity*
			 c) *Objectives: By the end of the lesson the learner will be able to:*
			   i. *Explain the term self*
			   ii. *Identify at least two actions of false identity and their related problems*
			 d) *Relevant previous knowledge: Students know themselves.*
			 e) *Introduction: Ask students to describe themselves.*
			 f) *Tasks/activities:*
			   i. *Discuss with learners, the concept of **self** in relation to their capabilities.*
			   ii. *Group learners to identify actions of false identity and their related problems.*
			 g) *Core points:*
			   i. *Self is the whole being of an individual, taking into consideration their personal and psychological nature and abilities.*
			   ii. *Some students pretend to be what they are not, e.g. they want to show off that they come from well to do families while it is not the case.*	

| | | h) Core competencies:
   i. *Communication and collaboration*
   ii. *personal development and leadership*

i) *Conclusion: Use questions and answers to summarise the lesson with learners*

j) *Evaluation:*
   i. *What is self?*
   ii. *What is the meaning of false identity?*
   iii. *Mention two examples of false identity.*
   iv. *Mention two problems that can result from false identity.*

Note:
**Teachers would be guided to tease out the learning outcomes and learning indicators from the lesson, so they know the relationship between lesson objectives and learning outcomes* | h) Core competencies:
   i. *Communication and collaboration*
   ii. *personal development and leadership*

i) *Conclusion: Use questions and answers to summarise the lesson with learners*

j) *Evaluation:*
   i. *What is self?*
   ii. *What is the meaning of false identity?*
   iii. *Mention two examples of false identity.*
   iv. *Mention two problems that can result from false identity.*

Note:
**Teachers would be guided to tease out the learning outcomes and learning indicators from the lesson, so they know the relationship between lesson objectives and learning outcomes* | |

3. Teaching, learning and assessment	3.1 Ask teachers to tease out the learning outcomes and the learning indicators from the sample lesson plan and explain how they are related to the objectives (NTS 3h).	3.1 Tease out the learning outcomes and the learning indicators from the sample lesson plan and explain how they are related to the objectives (NTS 3h).	20 mins
▶ **Noting opportunities for making *explicit* links to the Secondary School Curriculum** ▶ **Noting opportunities for integrating: GESI & SEL responsiveness and ICT and 21st C skills**	*E.g.* *LO: Demonstrate knowledge and understanding of self-identity.* *LI 1.1 Explain the term self.* *LI 1.2 Identify at least two actions of false identity and their related problems.*	*E.g.* *LO: Demonstrate knowledge and understanding of self-identity.* *LI 1.1 Explain the term self*	
	3.2 Ask teachers to brainstorm and come up with how the NTS can help to promote the delivery of lessons in the secondary school curriculum (NTS 3e, 3f, 3g, 3h, 3i and 3j).	3.2 Brainstorm to come up with how the NTS can help to promote the delivery of lessons in the secondary school curriculum (NTS 3e, 3f, 3g, 3h, 3i and 3j).	
	E.g. *NTS 3e: Employs a variety of instructional strategies that encourage student participation and critical thinking such as demonstration, peer teaching enquiry based teaching, role play etc.*	*E.g.* *NTS 3e: Employs a variety of instructional strategies that encourage student participation and critical thinking such as demonstration, peer teaching enquiry based teaching, role play, etc.*	
	NTS 3f: Pays attention to all learners, especially girls and students with Special Educational Needs, ensuring their progress. *For instance,* *a) ensuring even distribution of questions among male and female students.* *b) giving equal opportunities to learners to achieve*		

	c) Portraying female characters that are mostly represented by male characters.
	d) Put SEN learners in positions that will make them more active.
	e) Encouraging females to study male dominated courses.
	
	3.3 Ask teachers in their subject groups to refer to the NTS guidelines and discuss how the Standards are linked to the use of formative assessment (assessment for learning and assessment as learning) tools and summative assessment (assessment of learning) practices in their respective subject areas (NTS 3k, 3l, 3m, 3n, 3o and 3p).
	Note:
	NTS 3k: Integrates a variety of assessment modes into teaching to support learning.
	E.g.
	    a) Class exercise
	    b) Project work
	    c) Presentation (Individual and group)
	    d) Written assignment
	    e) Oral assignments, etc.
	
	NTS 3l: Listens to learners and gives constructive feedback.
	E.g.
	    a) Marking and
		3.3 Refer to the NTS guidelines and discuss how the Standards are linked to the use of formative assessment (assessment for learning and assessment as learning) tools and summative assessment (assessment of learning) practices in your respective subject areas (NTS 3k, 3l, 3m, 3n, 3o and 3p).
		
		Note:
		NTS 3k: Integrates a variety of assessment modes into teaching to support learning.
		
		E.g.
		a) Class exercise
		b) Project work, etc.	

	submission of books or scripts
	b) Asking questions and responding to questions
	
	NTS 3m: Identifies and remediates learners' difficulties or misconceptions, referring learners whose needs lie outside the competency of the teacher
	E.g.
	  a) Using resource persons
	  b) Team teaching
	  c) Mixed ability grouping NTS 3n: Keeps meaningful records of every learner and communicates progress clearly to parents and learners.
	E.g.
	  a) Records of students works
	  b) Continuous assessment
	  c) Learners reports cards
	
	NTS 3o: Demonstrates awareness of national and school learning outcomes of learners.
	E.g.
	  a) Keeping data on learners' performance periodically
	  b) Keeping GES national data
	
	NTS 3p: Uses objective criterion referencing to assess learners. E.g.
	  a) Using a rating scale to award grades
	  b) Marking scheme		

	3.4 Ask one or two groups to present their work for feedback from the larger group	3.4 Present your work for feedback from the larger group	
4. Evaluation and review of session: ▶ **Teachers need to identify critical friends to observe lessons and report at next session** ▶ **Identifying and addressing any outstanding issues relating to the lesson/s for clarification**	4.1 Ask teachers to reflect and share what they have learnt about the NTS. 4.2 Remind teachers to identify a critical friend to observe them in teaching their lessons in relation to PLC Session 4 and provide feedback at the next PLC session. 4.3 Remind teachers to read Session 5 from the PLC Handbook in preparation for the next PLC session.	4.1 Reflect and share what you have learnt about the NTS. 4.2 Remember to identify a critical friend to observe you in your lessons in relation to PLC Session 4 and provide feedback at the next PLC session. 4.3 Remember to read Session 5 from the PLC Handbook in preparation for the next PLC session.	10 mins

PLC Session 5: Professional Development

	Guidance notes on Leading the session. *What the PLC Coordinator will have to say during each stage of the session*	Guidance Notes on Teacher Activity during the PLC Session. *What teachers will do during each stage of the session.*	Time in session
1. **Review of previous session and introduction to new session** **NB: The guidance for PLC Coordinator should identify, address and provide explanations for any areas where teachers might require clarification on an aspect of the lesson.** **NB: PLC Coordinator should ask teachers to plan for their teaching as they go through the PLC session.**	1.1 Start the session by asking teachers to share one thing they did differently in the classroom and elsewhere based on the session on *the National Teachers' Standards*, which they think impacted learning positively. 1.2 Ask teachers to discuss and summarise in a single sentence why they think what a colleague did by way of application of lessons learned in the session on *gender equality and social inclusion*, supported learning. 1.3 Ask teachers to read Standards 1a, 1b, and 1c under *Professional Values and Attitudes* of the NTS and deduce possible learning outcomes (LOs) and learning indicators (LIs) for the session before reading the LOs and LIs (listed below) for the session. **Note:** LO: Learning Outcome: *This is the expected knowledge, understanding, skills, etc., to be acquired at the end of a lesson (Common Core Programme Curriculum).* LI: Learning Indicator: *This is the practical evidence that learning has taken place. It may include verbal responses, practical activity or products (Common Core Programme Curriculum).*	1.1 Share one thing you did differently in the classroom and elsewhere based on the session on *the National Teachers' Standards*, which you think impacted learning positively. 1.2 Discuss and summarise in a single sentence why you think what a colleague did by way of application of lessons learned in the session on *gender equality and social inclusion*, supported learning. 1.3 Read Standards 1a, 1b, and 1c under Professional Values and Attitudes of NTS and deduce possible learning outcomes (LOs) and learning indicators (LIs) of the session before reading the LOs and LIs listed for the session. **Note:** LO: Learning Outcome: *This is the expected knowledge, understanding, skills, etc., to be acquired at the end of a lesson (Common Core Programme Curriculum).* LI: Learning Indicator: *This is the practical evidence that learning has taken place. It may include verbal responses, practical activity or products (Common Core Programme Curriculum).*	30 mins

| | | LO 1: Demonstrate ability to critically and collectively improve teaching and learning (NTS 1a, 3e and 3k). LI 1.1 List strengths and limitations of own practice (NTS 1a). LI 1.2 Critique peers' practice using lesson notes, reflective logs, journals, portfolios, etc. (NTS 1a).

LO 2: Demonstrate knowledge and understanding of how to improve own personal and professional development through lifelong learning and continuous professional development (1b, 1d). LI 2.1 Identify gaps in knowledge to improve own personal development (go beyond the textbook and show evidence of the use of the library, internet, mentor /resource person's inputs, etc.). L1 2.2 Identify gaps in own knowledge to improve professional development (go beyond the textbook and show evidence of the use of the library, internet, mentor /resource person's inputs, etc.).

LO 3: Demonstrate skills in effective leadership qualities both in the classroom and wider school community (NTS 1c, 1f). LI 3.1 Model given roles. LI 3.2 Delegate roles taking into consideration Gender Equality Social Inclusion (GESI) (NTS 3f, 3g). | LO 1: Demonstrate ability to critically and collectively improve teaching and learning (NTS 1a, 3e and 3k). LI 1.1 List strengths and limitations of own practice (NTS 1a). LI 1.2 Critique peers' practice using lesson notes, reflective logs, journals, portfolios, etc. (NTS 1a).

LO 2: Demonstrate knowledge and understanding of how to improve own personal and professional development through lifelong learning and continuous professional development (1b, 1d). LI 2.1 Identify gaps in knowledge to improve own personal development (go beyond the textbook and show evidence of the use of the library, internet, mentor /resource person's inputs, etc.). L1.2.2 Identify gaps in own knowledge to improve professional development (go beyond the textbook and show evidence of the use of the library, internet, mentor /resource person's inputs, etc.).

LO 3: Demonstrate skills in effective leadership qualities both in the classroom and wider school community (NTS 1c, 1f). LI 3.1 Model given roles. LI 3.2 Delegate roles taking into consideration Gender Equality Social Inclusion (GESI) (NTS 3f, 3g). | |

Give regard for misconceptions, stereotypes, GESI, SEL, ICT, 21st century skills, etc.	1.4 Ask teachers to discuss and relate the concept of school based professional development to their various subjects (NTS 1b, 1c,1d and 1f). *E.g.* *a) Working with other teachers to exchange ideas at professional learning community sessions* *b) Co-teaching with colleagues to improve learning outcomes in their respective schools*	1.4 Discuss and relate the concept of professional development to your various subjects (NTS 1b, 1c,1d and 1f). *E.g.* *Working with other teachers to exchange ideas at professional learning community sessions*	10 mins
	1.5 Ask teachers to identify further areas of professional development opportunities that will enhance their teaching of subject areas (NTS 1b, 1c and 3a). *E.g.* *a) Universities provide opportunities for further studies in the subject areas* b) *Subject associations organize annual conferences to upgrade teachers' skills in teaching*	1.5 Identify further areas of professional development that will enhance your teaching of Science (NTS 1b, 1c and 3a). *E.g.* *Universities provide opportunities for further studies in the subject areas*	
	1.6 Ask teachers to identify possible misconceptions and stereotypes in their subject areas (NTS 3m). *E.g. (*Science) a) *Science is for students with very high IQ.* b) *Some science domains are gender specific, e.g., engineering for males, nursing for females, etc.* c) *Science is not suitable for students with Special Educational Needs (SEN)* d) *Science is expensive, etc.*	1.6 Identify possible misconceptions and stereotypes in Science (NTS 3m). *E.g. (*Science) *Science is for students with very high IQ, etc.*	
	1.7 Ask teachers to discuss possible ways to mitigate these misconceptions and stereotypes in their subject areas (NTS 3i).	1.7 Discuss possible ways to mitigate these misconceptions and stereotypes in your subject area (NTS 3i).	

E.g. (Science) a) *Invite role models / resource persons that have overcome these stereotypes and have achieved successes in the Science domains in the society to share their experiences to encourage the learners* b) *Play a pre-recorded video of persons who have defied these stereotypes and have achieved successes in the society for learners to watch and discuss, etc.* 1.8 As teachers in mixed gender groupings (where possible), to list some 21st century skills (NTS 3e, 3f and 3g). E.g. a) *Communication skills* b) *Collaboration skills* c) *Observation and enquiry skills* d) *Digital literacy skills* e) *Creativity and innovation skills* f) *Personal development and leadership skills, etc.* 1.9 Ask teachers to discuss possible activities they would adopt to develop the 21st century skills in their learners (NTS 3j). ***Communication skills*** *e.g., group discussion, role-play, presentation, etc.* ***Collaboration skills*** *e.g., group discussion, project / research, role-play, hands-on-activities, etc.*	*E.g. (Science)* *Invite role models / resource persons that have overcome these stereotypes and have achieved successes in the Science domains in the society to share their experiences to encourage the learners* 1.8 In mixed gender groupings (where possible) list some 21st century skills (NTS 3e, 3f and 3g). E.g. *Communication skills, etc.* 1.9 Discuss possible activities you would adopt to develop the 21st century skills in your learners (NTS 3j). ***Communication skills*** *e.g., group discussion, role- play, presentation, etc.*

	Observation and enquiry skills e.g., group discussion, project/ research, role-play, hands-on-activities, etc.		
	Creativity and innovation skills e.g., group discussion, project / research, role-play, hands-on-activities, presentation, etc.		
	Personal development skills e.g., group discussion, project/ research, role-play, hands-on-activities, extended learning, presentation.* *Leadership skill*s e.g., group discussion, project /research, role-play, hands-on-activities, extended learning, presentation.*		
	1.10 Ask teachers to identify ways of incorporating ICT in their lessons (NTS 3j). *E.g.* a) *Surfing OERs and other internet sources for information* b) *Teach using power Point presentation.* *Employ computer software such AutoCAD, Photoshop, Coral Draw, Paint, etc.*	1.10 Identify ways of incorporating ICT in your lessons (NTS 3j). *E.g.* *Surfing OERs and other internet sources for information*	
2. **Planning for teaching, learning and assessment activities for the lesson/s making links to the secondary school curriculum**	2.1 Ask teachers to discuss samples of their lesson topics in their various subject areas and link them to the concepts of LOs and LIs (NTS 3a, 3b). E.g. *Sample lesson topics in Science domains:* *Domain: Physics* *Topic: Scientific Measurement* *Sub-topic: S.I. Units - Basic units and Derived units of measurement*	2.1 Discuss samples of your lesson topics in your various subject areas and link them to the concepts of LOs and LIs (NTS 3a, 3b). *E.g.* *Sample lesson topics in Science domains:* *Domain: Physics* *Topic: Scientific Measurement* *Sub-topic: S.I. Units - Basic units and Derived units of measurement*	20 mins

	Domain:
	Biology Topic:
	Cells
	Sub-topic: Plant Cell and Animal Cell
	Domain:
	Chemistry Topic:
	Matter
	Sub-topic: The building blocks of matter
	Domain: Agricultural Science
	
	Topic: Rocks
	Sub-topic: Major types of rocks and their formation
	
	An example of an outline of a lesson plan based on the 2010 Senior High School Syllabus for teaching the topic Scientific Measurements. *
	
	*a) **Topic**: Scientific Measurement*
	
	*b) **Sub-topic**: S.I. Units - Basic units and Derived units of measurement*
	*c) **Objectives**: By the end of the lesson, the learner will be able to:*
	    i. *Use S.I. units in measurement*
	    ii. *Differentiate between basic units and derived units of measurement*
	    iii. *Give 5 examples of basic units of measurement*
	*d) **Relevant previous knowledge**: Learners have been measuring things around them.*
		Domain:
		Biology Topic:
		Cells
		Sub-topic: Plant Cell and Animal Cell
		Domain:
		Chemistry Topic:
		Matter
		Sub-topic: The building blocks of matter
		Domain: Agricultural Science
		
		Topic: Rocks
		Sub-topic: Major types of rocks and their formation
		
		An example of an outline of a lesson plan based on the 2010 Senior High School Syllabus for teaching the topic Scientific Measurements. *
		
		*a) **Topic**: Scientific Measurement*
		
		*b) **Sub-topic**: S.I. Units - Basic units and Derived units of measurement*
		*c) **Objectives**: By the end of the lesson, the learner will be able to:*
		    i. *Use S.I. units in measurement*
		    ii. *Differentiate between basic units and derived units of measurement*
		    iii. *Give 5 examples of basic units of measurement*
		*d) **Relevant previous knowledge**: Learners have been measuring things around them.*	

	e) Introduction:	e) Introduction:	
	Group learners, bearing in mind GESI and ask each group to discuss and write the things we measure in daily life and share with the whole class. Remind each group to appoint a leader and a secretary. The leader will do the sharing on behalf of the group.	Group learners, bearing in mind GESI and ask each group to discuss and write the things we measure in daily life and share with the whole the class. Remind each group to appoint a leader and a secretary. The leader will do the sharing on behalf of the group.	
	In groups, lead learners to discuss and write the aspects of the things identified that are measured.	In groups, lead learners to discuss and write the aspects of the things identified that are measured.	

f) **Tasks/activities**:	f) **Tasks/activities**:
i. Present a set of materials (e.g., watch, tape measure, etc) to learners. and brainstorm with them what the materials are used to measure)	i. Present a set of materials (e.g., watch, tape measure, etc) to learners. and brainstorm with them what the materials are used to measure)
ii. Discuss with learners the use of S.I. units in measurement.	ii. Discuss with learners the use of S.I. units in measurement.
iii. Discuss with class the differences between basic units and derived units of measurement.	iii. Discuss with class the differences between basic units and derived units of measurement.
iv. brainstorm with learners to give examples of basic units of measurements.	iv. brainstorm with learners to give examples of basic units of measurements.
g) **Closure**: Ask learners to reflect on the following questions: What have you learnt today? How are you going to apply what you have learnt today in everyday life?	g) **Closure**: Ask learners to reflect on the following questions: What have you learnt today? How are you going to apply what you have learnt today in everyday life?
h) **Evaluation**: i. Match the following quantities with their right units of measurement.	h) **Evaluation**: i. Match the following quantities with their right units of measurement.

Left column table:

S/N	QTY	S.I. UNITS
1	Time	Metre (m)
2	Mass	Metre square (m^2)
3	Volume	Kelvin (K)
4	Length	Kilogram (Kg)
5	Area	Cubic Metre (m^3)
6	Temperature	Second (S)

Right column table:

S/N	QTY	S.I. UNITS
1	time	Metre (m)
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3	volume	Kelvin (K)
4	length	Kilogram (Kg)
5	area	Cubic Metre (m^3)
6	temperature	Second (S)

i) **Content**
Some of the things in the environment we measure include:
trees, tables, human beings, playing field, food, water, etc.

i) **Content**
Some of the things in the environment we measure include:
trees, tables, human beings, playing field, food, water, etc.

	Aspects of these things that can be measured are: i. Tree - height ii. Table - length, breadth and height iii. Human being - height and mass iv. Food - mass, etc The S.I. Units for these measurements are: height measured in metres (m) mass measured in kilogram (Kg) volume measured in cubic metre /cubic centimetre (m^3/c^3) electric current measured in ampere (A) time measured in second(s) The main difference between Basic Units and Derived Units of measurement is that basic units are fundamental units of measurement that are generally recognized and accepted all over the world as units of measurement while derived units are units of measurement obtained by the multiplication or division of the basic units of measurement. Examples of Basic Units of measurement are: i. Kilogram for mass ii. Second for time iii. Kelvin for temperature iv. Candela for light intensity v. Mole for amount of substance vi. Ampere for electrical current vii. Metre for length **j) Core Competencies:** i. Communication and Collaboration ii. Personal Development and Leadership iii. Critical Thinking and Problem Solving	Aspects of these things that can be measured are: i. Tree - height ii. Table - length, breadth and height iii. Human being - height and mass iv. Food - mass, etc The S.I. Units for these measurements are: height measured in metres (m) mass measured in kilogram (Kg) volume measured in cubic metre /cubic centimetre (m^3/c^3) electric current measured in ampere (A) time measured in second(s) The main difference between Basic Units and Derived Units of measurement is that basic units are fundamental units of measurement that are generally recognized and accepted all over the world as units of measurement while derived units are units of measurement obtained by the multiplication or division of the basic units of measurement. Examples of Basic Units of measurement are: i. Kilogram for mass ii. Second for time iii. Kelvin for temperature iv. Candela for light intensity v. Mole for amount of substance vi. Ampere for electrical current vii. Metre for length **j) Core Competencies:** i. Communication and Collaboration ii. Personal Development and Leadership iii. Critical Thinking and Problem Solving	

	Teachers will be guided to tease out the learning outcomes and the learning indicators from the sample lesson plan	*Teachers will be guided to tease out the learning outcomes and the learning indicators from the sample lesson plan*	
3.0 Teaching, learning and assessment Reading and discussion of the teaching and learning activities noting, addressing, and explaining areas where teachers may require clarification ▶ **Noting opportunities for making *explicit* links to the Secondary School Curriculum** ▶ **Noting opportunities for integrating: GESI & SEL responsiveness and ICT and 21st C skills**	3.1 Ask teachers to deduce the learning outcomes and the learning indicators from the sample lesson plan and compare them with the objectives of the lesson. *E.g.* *LO: Demonstrate sound knowledge and understanding of scientific measurement.* *LI 1.1 Use S.I. units in measurement* *LI 1.2 Differentiate between basic units and derived units of measurement.* *LI 1.3 Give 5 examples of basic units of measurement.* ***Note:*** *The learning outcome can be achieved through the learning objectives as learning indicators.* 3.2 Ask teachers to identify gaps in their sample lesson plans and discuss possible ways of addressing same (NTS 3a). *E.g* ***Possible gaps:*** *absence of a prescribed textbook, etc**.*** ***Possible Solution****: use of a library,* *OERs and other internet facilities, etc.* ***Possible gaps:*** *lack of measuring instruments such as thermometers, meter rules, etc.* ***Possible Solution****: use of a video showing how measurement instruments are used, etc.*	3.1 Deduce the learning outcomes and the learning indicators from the sample lesson plan and compare them with the objectives of the lesson. *E.g.* *LO: Demonstrate sound knowledge and understanding of scientific measurement.* *LI 1.1 Use S.I. units in measurement* *LI 1.2 Differentiate between basic units and derived units of measurement.* 3.2 Identify gaps in your sample lesson plans and discuss possible ways of addressing same (NTS 3a). E.g. ***Possible gaps:*** *absence of a prescribed textbook, etc**.*** ***Possible Solution****: use of a library, OERs and other internet facilities, etc.*	30 mins

○	3.3 Ask teachers to suggest alternative ways of delivering the sample lessons (NTS 3e). *E.g.* a) *use of flipped classroom ("school work at home and home work at school,"* b) *extended learning* c) *demonstration* d) *simulation* e) *field trips /community walk* f) *work-based learning*	3.3 Suggest alternative ways of delivering the sample lessons (NTS 3e). E.g. *use of flipped classroom ("school work at home and home work at school")*	
	3.4 Ask teachers to indicate how they will promote GESI and SEL responsiveness in the lesson (NTS 2f, 3a, 3f and 3g). *E.g.* a) *Classroom arrangement that facilitates interaction between all learners* b) *Mixed ability/gender group activities* c) *Positive feedback to all learners especially SEN and other disadvantaged learners* d) *Use of a local resource person who has defied stereotyping to succeed in science.*	3.4 Indicate how you will promote GESI and SEL responsiveness in the lesson (NTS 2f, 3a, 3f and 3g). *E.g.* a) *Classroom arrangement that facilitates interaction between all learners* *.*	
	3.5 Ask teachers to discuss how the session is linked to the use of formative assessment tools and practices, e.g., assessment *for learning* and assessment *as* learning (NTS 3k, 3l). *E.g.* a) *Learners brainstorming to give examples of basic units of measurements.* b) *Learners reflecting on following questions:* *What have you learnt today?* *How are you going to apply what you have learnt today in everyday life?, etc.*	3.5 Discuss how the session is linked to the use of formative assessment tools and practices, e.g., assessment *for learning* and assessment *as* learning (NTS 3k, 3l). *E.g.* *Learners brainstorming to give examples of basic units of measurements.*	

	3.6 In groups, ask teachers to suggest other authentic assessment methods that could be used in their planned lesson taking GESI and SEL into account (NTS 3p).
	
	E.g.
	   a) *Self-assessment*
	   b) *Peer-assessment*
	   c) *Appraisal*
	   d) *Portfolio*
	   e) *Project*
	   f) *Role play*
	
	3.7 Ask teachers to list and discuss how the lesson makes use of resources to support relevant activities in the NTS (NTS 3j).
	
	E.g.
	a) *Pre-recorded videos*
	b) *YouTube videos*
	c) *Photographs*
	d) *OERs/Internet facilities*
	e) *Projectors*
	f) *Calculators*
	
	3.8 Ask one teacher to model a teaching activity in the sample lesson plan. **(EXTENSION ACTIVITY)**
		3.6 In groups, suggest other authentic assessment methods that could be used in your planned lesson taking GESI and SEL into account (NTS 3p).
		  E.g.
		        Self-assessment
		
		3.7 List and discuss how the lesson makes use of resources to support relevant activities in the NTS (NTS 3j).
		
		E.g.
		    Pre-recorded videos
		
		3.8 Model a teaching activity in the sample lesson plan. **(EXTENSION ACTIVITY)**	

4. Evaluation and review of session: ▶ **Teachers need to identify critical friends to observe lessons and report at next session** ▶ **Identifying and addressing any outstanding issues relating to the lesson/s for clarification**	4.1 Ask teachers to reflect and write what they have learnt in the session (NTS 1a, 3l and 3n). 4.2 Ask them to share what they have learnt with the larger group. 4.3 Remind teachers to identify a critical friend to observe them in teaching their lessons in relation to PLC session 5 and provide feedback at the next PLC Session. 4.4 Ask teachers to read Session 6 from the PLC Handbook in preparation for the next session.	4.1 Reflect and write what you have learnt in the session (NTS 1a, 3l and 3n). 4.2 Share what you have learnt with the larger group. 4.3 Identify a critical friend to observe you in teaching your lessons in relation to PLC session 5 and provide feedback at the next PLC Session. 4.4 Read Session 6 from the PLC Handbook in preparation for the next session.	15 mins

PLC Session 6: Community of Practice

	Guidance notes on Leading the session. *What the PLC Coordinator will have to say during each stage of the sessions*	Guidance Notes on Teacher Activity during the PLC Session. *What teachers will do during each stage of the sessions*	Time in session
1. Review of Previous Session and introduction to new session	1.1 Start the session by asking teachers to share one thing they did differently in the classroom and elsewhere based on the session on *professional development*, which they think impacted learning positively. 1.2 Ask teachers to discuss and summarise in a single sentence why they think what a colleague did by way of application of lessons learned in the session on *professional development*, supported learning.	1.1 Share one thing you did differently in the classroom and elsewhere based on the session on *professional development*, which you think impacted learning positively. 1.2 Discuss and summarise in a single sentence why you think what a colleague did by way of application of lessons learned in the session on *professional development*, supported learning.	30 mins
NB: The guidance for PLC Coordinator should identify, address, and provide explanations for any areas where teachers might require clarification on an aspect of the lesson. **NB: PLC Coordinator should ask teachers to plan for their teaching as they go through the PLC session**	1.3 Ask teachers to read Standards 1d,1e, 1f and 1g under *Professional Values and Attitudes* of the NTS and deduce possible learning outcomes (LOs) and learning indicators (LIs) for the session before reading the LOs and LIs (listed below) for the session. **Note:** LO: Learning Outcome: *This is the expected knowledge, understanding, skills, etc., to be acquired at the end of a lesson (Common Core Programme Curriculum).* LI: Learning Indicator: *This is the practical evidence that learning has taken place. It may include verbal responses, practical activity or products (Common Core Programme Curriculum).*	1.3 Read Standards 1d,1e, 1f and 1g under *Professional Values and Attitudes* of the NTS and deduce possible learning outcomes (LOs) and learning indicators (LIs) for the session before reading the LOs and LIs (listed below) for the session. **Note:** LO: Learning Outcome: *This is the expected knowledge, understanding, skills, etc., to be acquired at the end of a lesson (Common Core Programme Curriculum).* LI: Learning Indicator: *This is the practical evidence that learning has taken place. It may include verbal responses, practical activity or products (Common Core Programme Curriculum).*	

| | LO 1: Demonstrate knowledge and understanding of ethical, legal, and professional code of conduct (NTS 1d).
LI 1.1 Mention at least three Ministry of Education (MoE)/Ghana Education Service (GES) ethical codes of conduct for teachers.
LI 1.2 Discuss the duties and responsibilities of a teacher.
LI 1.3 List the dos and don'ts of the teaching profession.

LO 2: Demonstrate knowledge, understanding and skills in establishing and maintaining a cordial relationship with staff, learners and the entire school community (NTS 1e).

LI 2.1 analyse ways by which teachers can establish and maintain cordial relationships with staff, learners and the school community.
LI 2.2 Discuss ways by which teachers can be involved in community activities.
LI 2.3 State ways by which teachers can participate in school activities. | LO 1: Demonstrate knowledge and understanding of ethical, legal, and professional code of conduct (NTS 1d).
LI 1.1 Mention at least three Ministry of Education (MoE)/Ghana Education Service (GES) ethical codes of conduct for teachers.
LI 1.2 discuss the duties and responsibilities of a teacher.
LI 1.3 List the dos and don'ts of the teaching profession.

LO 2: Demonstrate knowledge, understanding and skills in establishing and maintaining a cordial relationship with staff, learners, and the entire school community (NTS 1e).
LI 2.1 Analyse ways by which teachers can establish and maintain cordial relationships with staff, learners and the school community.
LI 2.2 Discuss by which teachers can be involved in community activities.
LI 2.3 State ways by which teachers can participate in school activities. | |

	LO 3: Demonstrate knowledge, understanding and skills in establishing a positive teacher identity and acting as a good role model (NTS 1f). LI 3.1 Discuss at least five qualities of a good teacher. LI 3.2 List sources or records of class attendance by teachers. LO 4: Demonstrate knowledge, skills and understanding of the teacher's roles as a potential agent of change in the school, community and the nation (NTS 1g). LI 4.1 List at least four ways by which a teacher can be seen as a change agent in the school, community and the nation. LI 4.2 Give examples of challenges of the school and the community and suggest possible solutions. 1.4 Ask teachers to list at least three ethical codes of conduct for teachers in the Ghana Education Service (NTS 1d). *E.g.* a) *Teachers should be punctual to class* b) *Teachers should show regard for policies of MoE/GES and the school in their work* c) *Teachers should maintain respect for both males and females' dignity in class and community* d) *Teachers should avoid exploiting learners' vulnerability, etc.*	LO 3: Demonstrate knowledge, understanding and skills in establishing a positive teacher identity and acting as a good role model (NTS 1f). LI 3.1 Discuss at least five qualities of a good teacher. LI 3.2 List sources or records of class attendance by teachers. LO 4: Demonstrate knowledge, skills and understanding of the teacher's roles as a potential agent of change in the school, community and the nation (NTS 1g). LI 4.1 List at least four ways by which a teacher can be seen as a change agent in the school, community and the nation. LI 4.2 Give examples of challenges of the school and the community and suggest possible solutions. 1.4 List at least three ethical codes of conduct for teachers in the Ghana Education Service (NTS 1d). *E.g.* *Teachers should be punctual to class, etc.*	

	1.5 Ask teachers to discuss at least three duties and responsibilities of a teacher (NTS 1d). *E.g.* a) *Prepare relevant and adequate teaching notes* b) *Teach and give class exercises* c) *Mark and give feedback on class exercises* d) *Supervise learners*, etc.	1.5 Discuss at least three duties and responsibilities of a teacher (NTS 1d). *E.g. Prepare relevant and adequate teaching notes, etc. .*	
	1.6 Ask teachers to list at least four dos and four don'ts of the teaching profession (NTS 1d). *E.g.* *Dos:* a) *Do teach and give class exercises* b) *Do mark and give feedback on class exercises* c) *Do supervise learners' work* d) *Do offer guidance and counselling services to learners* e) *Do take part in school activities, etc.* *Don'ts* a) *Don't exploit the vulnerability of learners* b) *Don't send learners on errands during contact hours* c) *Don't engage in physical violence* d) *Don't administer corporal punishment on learners* e) *Don't discriminate against learners, etc.*	1.6 List at least four dos and four don'ts of the teaching profession (NTS 1d). *E.g.* *Dos: Do teach and give class exercises, etc.* *Don'ts Don't exploit the vulnerability of learners, etc.*	

	1.7 Ask teachers to analyse at least four ways by which they can establish and maintain cordial relationships with staff, learners and the school community (NTS 1e). *E.g.* a) *Read the teachers' code of ethics* b) *Attend and contribute to school meetings* c) *Take part in parent-teacher consultations* d) *Attend and contribute to School Management Committee (SMC) and Parents Association (PA) meetings* e) *Sensitize others on the need to educate both boys and girls* f) *Become aware of learners' background, etc.* 1.8 Ask teachers to discuss at least four ways by which they can be involved in community activities (NTS 1e).	1.7 Analyse at least four ways by which you can establish and maintain cordial relationships with staff, learners and the school community (NTS 1e). *E.g.* *Read the teachers' code of ethics, etc.* 1.8 Discuss at least four ways by which you can be involved in community activities (NTS 1e).	

	E.g. a) *Take part in community durbars* b) *Attend community festivals funerals, naming ceremonies, etc.* c) *Take part in community sports and games* d) *Participate in community cleanup exercises* e) *Support communities to organize their events in the school environment, etc.* 1.9 Ask teachers to discuss at least five qualities of a good teacher (NTS 1f). *E.g.* a) *Be a good communicator* b) *Be a good listener* c) *Be a good collaborator* d) *Be adaptable* e) *Be empathetic* f) *Be patient* g) *Share best practices* h) *Master content knowledge in their subject areas of specialization, etc.* 1.10 Ask teachers to list at least three sources of records to monitor the attendance of teachers (NTS 1f). *E.g.* a) *Clock-in and out machine* b) *Staff attendance register* c) *Teachers' attendance register in class* d) *Learners' attendance register* e) *Headmasters/mistress records, etc.*	*E.g.* *Take part in community durbars* *.* 1.9 Discuss at least five qualities of a good teacher (NTS 1f). *E.g.* *Be a good communicator, etc.* 1.10 List at least three sources of records to monitor the attendance of teachers (NTS 1f). *E.g.* *Clock-in and out machine, etc.*	

	1.11 Ask teachers to list at least four ways by which a teacher can be seen as an agent of change in the school, community and the nation (NTS 1g). *E.g.* a) *Promote inclusion and tolerance of all learners* b) *Actively prevent intolerance* c) *Challenge traditional gender roles and promote gender equality* d) *Engage in initiatives that bring about changes or improvement in the school (i.e., innovative use of local materials or facilitating access and social inclusion by learners' disability or access to water or clean latrines)* e) *Support parents to help with their ward's homework* f) *Follow up on learners who are absent from school, etc.* 1.12 Ask teachers to identify at least two challenges of the school and the community and suggest possible solutions (NTS 1g).	1.11 List at least four ways by which a teacher can be seen as an agent of change in the school, community and the nation (NTS 1g). *E.g.* *Promote inclusion and tolerance of all learner, etc.* 1.12 Identify at least two challenges of the school and the community and suggest possible solutions (NTS 1g).	

	E.g. ***School Challenges and solutions:*** 　a) *Accommodation challenges – seek support from PA, District Assembly and other benevolent organizations* 　b) *Indiscipline – effective enforcement of school rules and regulations* 　c) *Low performance – effective and efficient assessment, monitoring and supervision of learners, etc.* ***Community Challenges and solutions:*** a) *Teenage pregnancies – awareness creation/education to both learners and community* b) *Irresponsible parenting – sensitizing parents* c) *Ignorance - Awareness creation/education, etc.*	*E.g.* ***School Challenges and solutions:*** 　*Accommodation challenges – seek support from PA, District Assembly and other benevolent organizations, etc.* ***Community Challenges and solutions:*** 　*Teenage pregnancies – awareness creation/education to both learners and community, etc.*	
Give regard for possible misconceptions and stereotypes, GESI, SEL, ICT, 21st century skills, etc.	1.13 Ask teachers to identify possible misconceptions in various subject areas. *E.g. (English)* a) *English Language is for learners with high IQ* b) *Females are more fluent in English than males* c) *Girls are good at English and boys are good at Mathematics* d) *English Language is perceived to be a very difficult subject to pass, etc.*	1.13 Identify possible misconceptions in your various subject areas. *E.g. (English)* 　*Females are more fluent in English than males, etc.*	10 mins

	1.14 Discuss with teachers, possible ways to mitigate these misconceptions and stereotypes in teaching the various subjects. E.g.	1.14 Discuss possible ways to mitigate these misconceptions and stereotypes in teaching the various subjects. E.g.	
	a) In *English Language, you may invite role models/resource persons that have overcome these stereotypes and have achieved successes in the study of English Language to give a talk on such misconceptions and stereotypes* b) *Organize orientations to sensitize all learners on the benefits of the study of English Language by all categories of learners* c) *Organize English Language remediation for learners and professional development training to make English Language teachers more effective in classrooms, etc.*	*Organize orientations to sensitize all learners on the benefits of the study of English Language by all categories of learners, etc.*	
	1.15 Ask teachers to identify ways of incorporating ICT in their lessons.	1.15 Identify ways of incorporating ICT in your lessons.	

	E.g.
	a) *Employ computer assisted approaches such as surfing Open Educational Resources (OERs), Encarta Encyclopedia, Google classroom, etc., in teaching English Language*
	
	b) *Employ computer software such as Sunflower, Microsoft office, AnswerGarden, BrainPOP, Mathkids, etc., in teaching Mathematics and Science related subjects*
	c) *Explore and adopt the use of various teaching and learning research links to plan and deliver lessons in various subject areas e.g. academia.edu, ai.google, data-gov.in, etc.*
	
	1.16 Ask teachers to mention and discuss their lists of 21st century skills (from 1.16 above) and how they can support community of practice.
	E.g.
	a) *Critical thinking*:
	     Teamwork, assigning tasks, brainstorming, etc.
	b) *Research skills*:
	     Google search, group work and other research tools, etc.
	c) *Digital Citizenship:*
	     Use of mobile phones, computers, being IT compliant and use it to
		E.g.
		a) *Employ computer assisted approaches such as surfing Open Educational Resources (OERs), Encarta Encyclopedia, Google classroom, etc., in teaching English Language*
		
		b) *Employ computer software such as Sunflower, Microsoft office, AnswerGarden, BrainPOP, Mathkids, etc., in teaching Mathematics and Science related subjects*
		
		1.16 Mention and Discuss your lists of 21st century Skills (from 1.16 above) and how they can support community of practice.
		
		E.g.
		a) *Critical thinking*:
		     Teamwork, assigning tasks, brainstorming, etc.
		b) *Research skills*:
		     Google search, group work and other research tools, etc.	

	work with others in teaching and learning, etc.		
	1.17 Ask teachers to discuss possible activities they would adopt to develop the 21st century skills in their learners. *E.g. Communication skills, collaboration, observation and enquiry skills, digital literacy, creativity, personal development skills, etc., can be developed in learners using the following activities;* a) *group discussion* b) *project/research work* c) *role-play* d) *hands-on activities* e) *extended learning* f) *presentation* g) *drama* h) *field Trips* i) *debates* j) *quizzes, etc.*	1.17 Discuss possible activities you would adopt to develop the 21st century skills in their learners*. E.g. Communication skills, collaboration, observation and enquiry skills, digital literacy, creativity, personal development skills, etc.,* can be developed in learners using; *group discussion, etc.*	
2. Planning for teaching, learning and assessment activities for the lesson/s making links to secondary school curriculum	2.1 Ask teachers to discuss samples of their lesson plans in their various subject areas and link them to the NTS, particularly to community of practice (NTS 1d, 1e, 1f and 1g). *An example of an outline of a Lesson Plan based on the 2010 Senior High School Syllabus in English Language ** a) **Aspect:** *Writing* b) **Topic:** *Debate writing* c) **Sub-topic:** *Format of debate writing* d) **Objectives:** *By the end of the lesson, the learner will be able to;* i. *explain the term debate* ii. *list the features of a debate*	2.1 Discuss samples of your lesson plans in your various subject areas and link them to the NTS, particularly to community of practice (NTS 1d, 1e, 1f and 1g). *An example of an outline of a Lesson Plan based on the 2010 Senior High School Syllabus in English Language ** a) **Aspect:** *Writing* b) **Topic:** *Debate writing* c) **Sub-topic:** *Format of debate writing* d) **Objectives:** *By the end of the lesson, the learner will be able to;* i. *explain the term debate* ii. *list the features of a debate*	20 mins

	iii. write a good debate using the features
	iv. present a debate
	e) **RPK:** *Learners argue on issues of interest.*
	f) ***Introduction/pre-writing stage:*** *Introduce the lesson by asking learners to;*
	  i. *brainstorm (in two mixed gender groups), on which of these two people is more important – a farmer and a teacher*
	  ii. *share their opinions with the wider class*
	
	g) ***Tasks/Activities/ Writing Stage:***
	  i. *In mixed gender groups, let learners brainstorm and come out with the meaning of debate.*
	  Note:
	  A debate is a formal discussion or a process that involves a formal discourse of a particular topic often including a moderator and audience, etc.
	  Also, it is an organized argument between two opposing sides on a given topic with some agreed modalities.
	
	  ii. *Through a discussion method, guide learners to identify the features of a debate.*
	  Note:
	  A debate has three main features.
	  Introduction:
		iii. write a good debate using the features
		iv. present a debate v.
		e) **RPK:** *Learners argue on issues of interest.*
		f) ***Introduction/pre-writing stage:*** *Introduce the lesson by asking learners to;*
		  i. *brainstorm (in two mixed gender groups), on which of these two people is more important – a farmer and a teacher*
		  ii. *share their opinions with the wider class*
		
		g) ***Tasks/Activities/ Writing Stage:***
		  i. *In mixed gender groups, let learners brainstorm and come out with the meaning of debate.*
		  Note:
		  A debate is a formal discussion or a process that involves a formal discourse of a particular topic often including a moderator and audience, etc.
		  Also, it is an organized argument between two opposing sides on a given topic with some agreed modalities
		
		  ii. *Through a discussion method, guide learners to identify the features of a debate.*
		  Note:
		  A debate has three main features.
		  Introduction:	

		(Vocatives, motion and declaration of stand) **Body** :(Explanation of key terms or words of the motion, rebuttal of opponent points, state your main points, etc.) **Conclusion:** (Summarize main points in the body, call for support, etc.) iii. In two groups, introduce a debate topic for learners and guide them to develop a good debate using the features of a debate. E.g. "Female education is the panacea for the country's underdevelopment" iv. Allow the groups to select their members to present their debate in the class.	(Vocatives, motion and declaration of stand) **Body:** (Explanation of key terms or words of the motion, rebuttal of opponent points, state your main points, etc.) **Conclusion:** (Summarize main points in the body, call for support, etc.) iii. In two groups, introduce a debate topic for learners and guide them to develop a good debate using the features of a debate. E.g. "Female education is the panacea for the country's underdevelopment" Allow the groups to select their members to present their debate in the class.	

		h) **Core Points:** *Writing skills, speaking skills, listening skills, critical thinking, etc.*
		i) **Closure:** *Review the lesson by asking the learners to mention what they have learnt*
		j) **Evaluation**
		  i. *What is a debate?*
		  ii. *List the features of a debate*
		  iii. *Write a debate for or against the motion: "The extraction of Ghana's mineral resources has caused more harm than good" and submit in the next lesson.*
		k) **Remarks:** **Teachers would be guided to tease out the learning outcomes and learning indicators from the lesson.*
			h) **Core Points:** *Writing skills, speaking skills, listening skills, critical thinking, etc.*
			i) **Closure:** *Review the lesson by asking the learners to mention what they have learnt*
			j) **Evaluation**
			  i. *What is a debate?*
			  ii. *List the features of a debate*
			  iii. *Write a debate for or against the motion: "The extraction of Ghana's mineral resources has caused more harm than good" and submit in the next lesson.*
			k) **Remarks:** **Teachers would be guided to tease out the learning outcomes and learning indicators from the lesson.*	

3. **Teaching, learning and assessment** ▶ **Noting opportunities for making *explicit* links to the Secondary School Curriculum** ▶ **Noting opportunities for integrating: GESI responsiveness and ICT and 21ˢᵗ C skills**	3.1 Ask teachers to tease out the learning outcomes and learning indicators from the sample lesson plan above and link these to the objectives of the lesson. LO: Demonstrate knowledge and understanding of a debate and its features. LI 1.1 Explain the term *debate* LI 1.2 State the features of a debate. LI 1.3 Write a debate for or against the motion: "Technology has made the world a better place, etc".	3.1 Tease out the learning outcomes and learning indicators from the sample lesson plan above. LO: Demonstrate knowledge and understanding of a debate and its features. LI 1.1 Explain the term debate, etc.	20 mins

	3.3 Ask teachers to suggest alternative ways of delivering the sample lesson.
	
	E.g.
	a) Use YouTube videos or pre- recorded videos on academic and political debates etc.
	b) Demonstration/ simulation
	c) Invite resources persons
	d) Peer teaching, etc.
	
	3.4 Ask teachers to show how their sample lesson plan can promote GESI and SEL responsiveness.
	E.g.
	  a) Classroom arrangement that facilitates interaction
	  b) Putting learners in mixed ability/gender groups
	  c) Using positive feedback to learners especially the disadvantaged/margin al ized
	  d) Using a local resource person(s) who has/have defied stereotyping to succeed in English Language, etc.
	
	3.5 Ask teachers to discuss how the session is linked to the use of formative assessment tools and practices i.e., assessment *for* learning and assessment **as** learning.
		3.3 Suggest alternative ways of delivering the sample lesson.
		
		E.g.
		  Use YouTube videos or pre- recorded videos on academic and political debates etc.
		
		3.4 Review the sample lesson plans to identify activities that promote GESI and SEL responsiveness.
		E.g.
		  Using classroom arrangement that facilitates interaction among all learners, etc
		
		3.5 Discuss how the session is linked to the use of formative assessment tools and practices i.e., assessment *for* learning and assessment **as** learning.	

	E.g. *a) Use assessment to diagnose learners' needs (for)* *b) Use assessment to review learners' progress (for)* *c) Use assessment to give guidance about opportunities through feedback (for)* ***d) Encourage self-assessment (as), etc.*** 3.7 Guide teachers to list and discuss how the session makes use of resources to support relevant activities in the NTS. *E.g.* *a) Pre-recorded videos* *b) Photographs* *c) OERs/Internet facilities* *d) Projectors, etc.* 3.8 Ask a teacher to model a teaching activity if the sample lesson plan. **(EXTENSION ACTIVITY)**	*E.g.* *a) Use assessment to diagnose learners' needs (for)* *b) Use assessment to review learners' progress (for)* ***c) Encourage self-assessment (as), etc.*** 3.7 List and discuss how the session makes use of resources to support relevant activities in the NTS. *E.g.* *OERs/Internet facilities, etc.* 3.8 Model a teaching activity in the sample lesson plan. **(EXTENSION ACTIVITY)**	
4. Evaluation and review of session: ▶ **Identifying and addressing any outstanding issues relating to the lesson/s for clarification** ▶ **Noting that teachers need to identify critical friends to observe lessons and report at next session**	4.1 Ask teachers to reflect and write what they have learnt in the session. 4.2 Ask them to share what they have learnt with the larger group. 4.3 Remind teachers to identify a critical friend to observe them in teaching their lessons in relation to PLC Session 6 and provide feedback at the next PLC session. 4.4 Remind teachers to read Session 7 from the PLC Handbook in preparation for the next session.	4.1 Reflect and write what you have learnt in the session. 4.2 Share what they have learnt with the larger group. 4.3 Identify a critical friend to observe you in teaching your lesson in relation to PLC Session 6 and provide feedback at the next PLC session. 4.4 Read Session 7 from the PLC Handbook in preparation for the next session.	10 mins

PLC Session 7: Knowledge of Educational Frameworks and Curriculum

	Guidance notes on Leading the session. *What the PLC Coordinator will have to say during each stage of the session*	Guidance Notes on Teacher Activity during the PLC Session. *What teachers will do during each stage of the session.*	Time in session
1. **Review of previous session and introduction to new session** **NB: The guidance For PLC Coordinator should identify, address, and provide explanations for any areas where teachers might require clarification on an aspect of the lesson.** **NB: PLC Coordinator should ask teachers to plan for their teaching as they go through the PLC session NB PLC Coordinator should ask teachers to plan for their teaching as they go through the PLC session**	1.1 Start the session by asking teachers to share one thing they did differently in the classroom and elsewhere based on the session on *professional development*, which they think impacted learning positively. 1.2 Ask teachers to discuss and summarise in a single sentence why they think what a colleague did by way of application of lessons learned in the session on *community of practice*, supported learning. 1.3 Ask a teacher to read National Teachers' Standards 2a, 2b, 2c and 2d under *Professional Knowledge* of the NTS and deduce possible learning outcomes (LOs) and learning indicators (LIs) for the session before reading the LOs and LIs (listed below) for the session. LO 1: Exhibit familiarity with the education system and key policies guiding it (NTS 2a, 2b). LI 1.1 State the similar characteristics of key educational policies	1.1 Share one thing you did differently in the classroom and elsewhere based on the session on *professional development*, which you think impacted learning positively. 1.2 Discuss and summarise in a single sentence why you think what a colleague did by way of application of lessons learned in the session on *community of practice*, supported learning. 1.3 Read National Teachers' Standards (NTS 2a, 2b, 2c and 2d) under *Professional Knowledge* of the NTS and deduce possible learning outcomes (LOs) and learning indicators (LIs) for the session before reading the LOs and LIs (listed below) for the session. LO1: Exhibit familiarity with the education system and key policies guiding it (NTS 2a, 2b). LI 1.1 State the similar characteristics of key educational policies	30mins

| | LI 1.2 State two differences in key educational policies
LI 1.3 Explain expected outcomes of educational curricula
LI 1.4 Analyse the importance of educational frameworks.

LO 2: Demonstrate comprehensive knowledge of the official school curriculum, including learning outcomes (NTS 2b, 3o).
LI 2.1 Discuss issues that surround the implementation of the curriculum for vulnerable groups (NTS 3f, 3g and 3m)
LI 2.2 Describe how gender inequalities can affect learner outcomes.
LI 2.3 Outline how learners need to work towards achieving higher examination grades.

LO 3: Show command of content knowledge, pedagogical knowledge and pedagogical content knowledge (NTS 2c).
LI 3.1 State how gaps in subject and pedagogical knowledge of teachers can be identified and addressed
LI 3.2 Explain how children develop and learn in diverse contexts and apply this in teaching
LI 3.3 Describe how to organize learning using teacher and learner centred and gender responsive pedagogies. | LI 1.2 State two differences in key educational policies
LI 1.3 Explain expected outcomes of educational curricula
LI 1.4 Analyse the importance of educational frameworks.

LO 2: Demonstrate comprehensive knowledge of the official school curriculum, including learning outcomes (NTS 2b, 3o).
LI 2.1 Discuss issues that surround the implementation of the curriculum for vulnerable groups (NTS 3f, 3g and 3m)
LI 2.2 Describe how gender inequalities can affect learner outcomes.
LI 2.3 Outline how learners need to work towards achieving higher examination grades.

LO 3: Show command of content knowledge, pedagogical knowledge and pedagogical content knowledge (NTS 2c).
LI 3.1 State how gaps in subject and pedagogical knowledge of teachers can be identified and addressed
LI 3.2 Explain how children develop and learn in diverse contexts and apply this in teaching
LI 3.3 Describe how to organize learning using teacher and learner centred and gender responsive pedagogies. | |

	LO4: Demonstrate knowledge of how to teach numeracy and literacy in multi-grade classrooms at the early grade level (NTS 2d).
	
	LI 4.1 Plan and teach using differentiated instruction
	LI 4.2 Guide learners to perform mathematical operations using manipulatives
	LI 4.3 Guide learners to read and write using an appropriate language teaching tool.
	
	1.4 Ask teachers to state the similar characteristics of key educational policies.
	E.g. Each policy has items including the following:
	   a) Preamble
	   b) Policy goal(s)
	   c) Policy objective(s)
	   d) Policy statement(s)
	   e) Policy implementation plan.
	
	1.5 As teachers in groups to discuss the differences in key educational policies.
	E.g. Content of policy depends on rationale, objectives, outcomes, etc.
		LO 4: Demonstrate knowledge of how to teach numeracy and literacy in multi-grade classrooms at the early grade level (NTS 2d).
		
		LI 4.1 Plan and teach using differentiated instruction
		LI 4.2 Guide learners to perform mathematical operations using manipulatives
		LI 4.3 Guide learners to read and write using an appropriate language teaching tool.
		
		1.4 State the similar characteristics of key educational policies.
		E.g. Each policy has items including:
		   Preamble, etc.
		
		1.5 In groups, discuss the differences in key educational policies.
		E.g. Content of policy depends on rationale, objectives, outcomes, etc.	

		1.6 Ask teachers to identify expected outcomes of some educational policies.	1.6 Identify expected outcomes of some educational policies.	
		E.g.	*E.g.*	
		The Pre-Tertiary Teacher Professional Development and Management (PTPDM)	*The Pre-Tertiary Teacher Professional Development and Management (PTPDM)*	
		a) *provides the framework for developing standards, core values and ethics for the teaching profession*	*provides the framework for developing standards, core values and ethics for the teaching profession, etc.*	
		b) *develop teachers' ability to adopt reflective teaching approaches to enhance the quality of lesson delivery*		
		c) *specifies principles for teacher management in order to motivate excellence in teacher performance and commitment to lifelong learning*		
		d) *provides areas for setting regulatory standards to govern teachers' work and living conditions in order to make teaching an attractive and rewarding career*		
		e) *fosters the notion of teaching as a life-long career which is linked to an evidence-based system of career advancement and promotion, etc.*		
		1.7 Ask teachers to write some of the expected outcomes of any educational curriculum in Ghana.	1.7 Write some of the expected outcomes of any educational curriculum in Ghana.	

		E.g.	E.g.	
		The Senior High School mathematics curriculum is aimed at developing individuals to become mathematically literate, good problem solvers, have the ability to think creatively and have both the confidence and competence to participate fully in Ghanaian society as responsible local and global citizens (Mathematics Syllabus for SHS, 2010).	*The Senior High School mathematics curriculum is aimed at developing individuals to become mathematically literate, etc,* *(Mathematics Syllabus for SHS, 2010).*	
		1.8 Lead teachers to discuss the benefits of educational frameworks.	1.8 Discuss the benefits of educational frameworks.	

| | | *E.g.*
Educational frameworks
are models for course
designed that help
teachers to
a) *align learning goals*
    with classroom
    activities
b) *create motivating*
    and inclusive
    environments for
    learning
c) *integrate assessment*
    into learning, etc.

1.9 Ask teachers to indicate what a teacher needs to do to demonstrate knowledge of educational frameworks and curriculum.
E.g.
a) *Show comprehensive*
    knowledge of the
    official school
    curriculum,
    including learning
    outcomes
b) *Possess secure*
    content
    knowledge,
    pedagogical
    knowledge and
    pedagogical
    content
    knowledge
c) *Demonstrate how*
    curricula are
    approached and
    taught at all levels
d) *Highlight possible*
    misconceptions
    and how they can
    be addressed, etc. | *E.g.*
Educational frameworks
are models for course
designed that help teachers
to align learning goals with
classroom activities, etc.

1.9 Indicate what a teacher needs to do to demonstrate knowledge of educational frameworks and curriculum.

E.g.
    Show comprehensive
    knowledge of the official
    school curriculum,
    including learning
    outcomes, etc.

. | |

Give regard for misconceptions and stereotypes, GESI, SEL, ICT, 21st century skills, etc.	1.10 Ask teachers to identify possible misconceptions and stereotypes in learning various subjects. E.g. *(Mathematics)* a) *If one wants to be good at mathematics, one must memorize lots of facts and formulas* b) *Some students don't just have an aptitude for mathematics* c) *There is only one way to solve a problem in mathematics* d) *Girls are less interested in mathematics than boys, etc.* 1.11 Discuss with teachers how these misconceptions about teaching and learning in mathematics classroom can be addressed. *E.g.* a) *Teachers should discover students' systematic errors in mathematics* b) *Teachers should mostly focus on identifying students' misconceptions rather than student errors* c) *Teachers must create conducive learning environment for all learners, etc.*	1.10 Identify possible misconceptions and stereotypes in learning various subjects E.g. *(Mathematics)* *If one wants to be good at mathematics, one must memorize lots of facts and formulas, etc.* 1.11 Discuss how these misconceptions about teaching and learning in mathematics classroom can be addressed. *E.g.* a) *Teachers should discover students' systematic errors in mathematics, etc.*	10 mins

2. **Planning for teaching, learning and assessment activities for the lesson/s making links to secondary school curriculum**	2.1 Ask teachers to discuss samples of their lesson plans based on the SHS 2010 syllabuses in their respective subjects and link them to the NTS (NTS 3a, 3e, 3g and 3j). *(E.g. Mathematics)* *An example of an outline for teaching understanding Sets and Operations on Sets from the SHS 2010 Mathematics Syllabus** *a) **Topic:** Sets and Operations on Sets* *b) **Sub-topic**: Finding the number of subsets in a set with N elements* *c) **Objective**: Determine and write the number of subsets in a set* *d) **Relevant previous knowledge**: students can describe sets* *e) **Introduction**: Review with students the description of sets* *f) **Tasks/activities:*** *i. Present instructional resources (consider different learning styles in selection) and guide students to group them into various sets* *ii. Guide learners in a discussion to find the number of subsets they can derive from the set of objects given* *iii. In groups, let learners discuss to deduce a formula for finding the*	2.1 Discuss samples of their lesson plans based on the SHS 2010 syllabuses in your respective subjects and link them to the NTS (NTS 3a, 3e, 3g and 3j). *(E.g. Mathematics)* *An example of an outline for teaching understanding Sets and Operations on Sets from the SHS 2010 Mathematics Syllabus** *a) **Topic:** Sets and Operations on Sets* *b) **Sub-topic**: Finding the number of subsets in a set with N elements* *c) **Objective**: Determine and write the number of subsets in a set* *d) **Relevant previous knowledge**: students can describe sets* *e) **Introduction**: Review with students the description of sets* *f) **Tasks/activities:*** *i. Present instructional resources (consider different learning styles in selection) and guide students to group them into various sets* *ii. Guide learners in a discussion to find the number of subsets they can derive from the set of objects given* *iii. In groups, let learners discuss to deduce a formula for finding the*	20 mins

	number of subsets that can be derived in a given set. E.g. The **Set** {аааа} has two subsets {аааа} and the { } iv. Guide students to create a table showing the relationship between elements in a set and the number of subsets g) **Core Points**: The number of subsets in a given set is calculated as 2^{nnnn} where 'n' is the number of elements in the set h) **Core Competencies** Collaboration, problem solving, critical thinking, etc. i) **Closure:** Review the lesson and ask evaluation questions j) **Evaluation**: Find the number of subsets in a set with 5 elements. *Teachers would be guided to tease out the LOs and the LIs from the sample lesson and compare with the objectives of the lesson.	number of subsets that can be derived in a given set. E.g. The **Set** {аааа} *has two subsets {аааа} and the { }* iv. Guide students to create a table showing the relationship between elements in a set and the number of subsets g) **Core Points**: The number of subsets in a given set is calculated as 2^{nnnn} where 'n' is the number of elements in the set h) **Core Competencies:** Collaboration, problem solving, critical thinking, etc. i) **Closure:** Review the lesson and ask evaluation questions j) **Evaluation**: Find the number of subsets in a set with 5 elements. * Teachers would be guided to tease out the LOs and the LIs from the sample lesson and compare with the objectives of the lesson.	

3. Teaching, learning and assessment ▶ **Reading and discussion of the teaching and learning activities noting, addressing, and explaining areas where teachers may require Clarification Noting opportunities for making *explicit* links to the Secondary School Curriculum** ▶ **Noting opportunities for integrating: GESI & SEL responsiveness and ICT and 21st C skills**	3.1 Ask teachers to identify gaps in their sample lesson plans and discuss possible ways of addressing them (NTS 1a, 3d, 3e, 3f, 3g and 3m). Examples of *possible gaps:* a. *Inadequate prescribed textbooks for mathematics* *b.* *Lack of gender responsive materials in the classroom, etc*. *Possible solutions*: *Use of:* a) *Llibrary* b) *Open Educational Resources (OERs) and **o**ther Internet facilities* c) *PLC sessions on GESI, etc.*	3.1 Identify gaps in their sample lesson plans and discuss possible ways of addressing them (NTS 1a, 3d, 3e, 3f, 3g and 3m). Examples of *possible gaps:* a) *Inadequate prescribed textbooks for mathematics,* b) *Lack of gender responsive materials in the classroom, etc*. *Possible solutions*: *Use of:* *a library*	20 mins

	3.2 Ask teachers to tease out the learning outcomes and learning indicators from the sample lesson plan. *E.g.* *LO: Demonstrate knowledge of the subsets in a set.* *LI 1. Determine the number of subsets in a set* *LI 2. Deduce a formula for calculating the number of subsets in a given set.*	3.2 Tease out the learning outcomes and learning indicators from the sample lesson plan. *E.g.* *LO: Demonstrate knowledge of the subsets in a set.* *LI 1. Determine the number of subsets in a set*	

	3.3 Ask teachers to suggest alternative ways of delivering the sample lesson.
	E.g. *Use of:*
	  a) *flipped classroom,*
	  b) *extended learning*
	  c) *simulation*
	  d) *real life examples*
	  e) *using algebra*
	  f) *using Venn diagrams, etc.*
		3.3 Suggest alternative ways of delivering the sample lesson.
		
		E.g. *Use of:*
		  flipped classroom,	

	3.4 Ask teachers to identify activities that promote GESI and SEL responsiveness in their sample lesson plans (NTS 3c, 3e, 3f and 3g). E.g. a) *Classroom arrangement that facilitates interaction* b) *Mixed ability/gender groupings* c) *Using positive feedback to students especially the disadvantaged* d) *Use of a local materials* e) *Fair distribution of questions* f) *Using posters that represent male and female students appropriately, etc.*	3.4 Identify activities that promote GESI and SEL responsiveness in your sample lesson plans (NTS 3c, 3e, 3f and 3g). E.g. *Classroom arrangement that facilitates interaction, etc.*	

		3.5 Ask teachers to discuss how the session is linked to the use of formative assessment tools and practices for example, assessment *for* learning and assessment *as* learning (NTS 3k, 3l and 3m). *E.g.* *a) Learners do self-assessment (as),* *b) learners discuss with peers in peer-assessment (as/for)* *c) Learners create charts under guidance (for),*	3.5 Discuss how the session is linked to the use of formative assessment tools and practices for assessment *for* learning and assessment *as* learning (NTS 3k, 3l and 3m). *E.g.* *Self-assessment (as), etc.*	
		3.6 Ask teachers to list and discuss how the sample lesson makes use of resources to support relevant activities in the NTS. E.g. *a) Posters on Sets* *b) Charts showing the relationship between operations on sets* *c) Task sheets, etc.*	3.6 List and discuss how the sample lesson makes use of resources to support relevant activities in the NTS. E.g. *Posters on Sets,*	
		3.7 Ask one teacher to model a teaching activity in the sample lesson plan. **(EXTENSION ACTIVITY)**	3.7 Model a teaching activity in the sample lesson plan. **(EXTENSION ACTIVITY)**	
4.	**Evaluation and review of session:** ▶ **Identifying and addressing any outstanding issues relating to the lesson/s for clarification**	4.1 Ask teachers to reflect and write what they have learnt in the session using 'Talk-to-the- hand' strategy (Each teacher places the palm on a sheet of paper and trace the fingers out, and in each finger, write one thing learnt. In all, five things will be written.	4.1 Reflect and write what you have learnt in the session. Using the 'Talk-to-the-hand' strategy, write five things learnt.	15 mins

▶ **Noting that teachers need to identify critical friends to observe lessons and report at next session**	4.2 Ask teachers to share what they have written with the larger group (NTS 1a). 4.3 Remind teachers to identify a critical friend to observe them while they teach their lesson in relation to PLC Session 7 and provide feedback at the next PLC session. 4.4 Remind teachers read Session 8 from the PLC Handbook in preparation for the next session.	4.2 Share what you have written with the larger group (NTS 1a). 4.3 Identify a critical friend to observe your lessons in relation to PLC Session 7 and provide feedback at the next PLC session. 4.4 Remember to read Session 8 from the PLC Handbook in preparation for the next session.	

PLC Session 8: Knowledge of Learners

	Guidance notes on Leading the session. *What the PLC Coordinator will have to say during each stage of the session*	Guidance Notes on Teacher Activity during the PLC Session. *What teachers will do during each stage of the session.*	Time in session
1. Review of previous session and introduction to new session	1.1 Start the session by asking teachers to share one thing they did differently in the classroom and elsewhere based on the session on *knowledge of educational frameworks and curriculum development*, which they think impacted learning positively. 1.2 Ask teachers to discuss and summarise in a single sentence why they think what a colleague did by way of application of lessons learned in the session on *knowledge of educational frameworks and curriculum development*, supported learning.	1.1 Share one thing you did differently in the classroom and elsewhere based on the session on *knowledge of educational frameworks and curriculum development*, which you think impacted learning positively. 1.2 Discuss and summarise in a single sentence why you think what a colleague did by way of application of lessons learned in the session on *knowledge of educational frameworks and curriculum development*, supported learning.	30 mins

NB: The guidance for PLC Coordinator should identify, address, and provide explanations for any areas where teachers might require clarification on an aspect of the lesson. **NB: PLC Coordinator should ask teachers to plan for their teaching as they go through the PLC session**	1.3 Ask a teacher to read Standards 2e and 2f of the NTS, the learning outcomes (LOs) and the learning indicators (LIs) of the session to set the stage for the session. LO 1: Demonstrate understanding of how students learn in diverse contexts (NTS 2e). LI 1.1 Give examples of different contexts under which learners learn. LI 1.2 Explain how contexts under which learners learn influence how they learn. LO 2: Demonstrate understanding of different learning styles of learners (NTS 2e). LI 2.1 List at least three different learning styles. LI 2.2 Analyse at least three different learning styles of learners. LO 3: Demonstrate knowledge and understanding of GESI issues (NTS, 2e, 3f). LI 3.1 Mention at least five GESI related issues in learning. LI 3.2 Outline the need for incorporating GESI issues into classroom activities. 1.4 Ask teachers to discuss and relate the concept of knowledge of learners to their various subject domains (NTS 1a, 2e and 3i). 1.5 Ask teachers to identify different	1.3 Read Standards 2e and 2f the NTS, the learning outcomes (LOs) and the learning indicators (LIs) of the session to set the stage for the session. LO 1: Demonstrate understanding of how students learn in diverse contexts (NTS 2e). LI 1.1 Give examples of different contexts under which learners learn. LI 1.2 Explain different contexts under which learners learn influence how they learn. LO 2: Demonstrate understanding of different learning styles of learners (NTS 2e). LI 2.1 List at least three different learning styles. LI 2.2 Analyse at least three different learning styles of learners. LO 3: Demonstrate knowledge and understanding of GESI (NTS 2e, 3f). LI 3.1 Mention at least five GESI related issues in learning. LI 3.2 Outline the need for incorporating GESI issues into classroom activities. 1.4 Discuss and relate the concept of knowledge of learner to your various subject domains (NTS 1a, 2e and 3i). 1.5 Identify different learning styles of learners	

	learning styles of learners that will enhance teaching of their subjects (NTS 2e, 2f, 3e and 3g). *E.g.* a) *Auditory learning* b) *Kinesthetic learning* c) *Tactile learning* d) *Visual learning*	that will enhance teaching of your subjects (NTS 2e, 2f, 3e and 3g). *E.g.* *Auditory learning*	
	1.6 Ask teachers to discuss the different learning styles (listed in Activity 1.5) in a way that will enhance teaching of their subjects (NTS 2e, 2f, 3e and 3g). *E.g.* a) *Visual learning* *Learners need to be shown, not told. Colour, size and shape can be used to emphasise written information. Diagrams, mind maps, pictures and cartoons will all have good impact.* b) *Auditory learning* *Learners make good use of verbal instruction, class discussion and listening to their colleagues. They usually like to talk as well as listen and explain things in their own words.* c) *Kinaesthetic/tactile learning* *Learners are those who learn best when they're active and doing. They enjoy opportunities for hands on learning including case studies, simulations, experiments and practical work which involves moving and touching.*	1.6 Discuss the different learning styles (listed in Activity 1.5) in a way that will enhance teaching of their subjects (NTS 2e, 2f, 3e and 3g). *E.g.* *Visual learning* *Learners need to be shown, not told. Colour, size and shape can be used to emphasise written information. Diagrams, mind maps, pictures and cartoons will all have good impact.*	

Give regard for possible misconceptions and stereotypes, GESI, SEL, ICT, 21st century skills, etc.	1.7 Ask teachers to identify possible misconceptions and stereotypes about their subjects (NTS 3m). *E.g. (Social Studies)* a) *Social Studies is for students with very low IQ* b) *Social Studies is easy to pass* c) *Social Studies is mainly Geography, etc.*	1.7 Identify possible misconceptions and stereotypes about your subject (NTS 3m). *E.g. (Social Studies)* a) *Social Studies is for students with very low IQ.* b) *Social Studies is easy to pass*	10 mins
	1.8 Ask teachers to discuss possible ways to address these misconceptions and stereotypes in their subject areas in the classroom (NTS 3m). *E.g. (Social Studies)* *Invite a resource person to draw the attention of teachers and learners to the links between Social Studies and the other subjects.* *The message could be that Social Studies as a subject supports other subjects and is supported by other subjects. For example, why learners from a particular background cannot access support in English language easily can be explained by Social Studies. Similarly, good numeracy skills (such as calculations) can facilitate map reading in Social Studies.*	1.8 Discuss possible ways to address these misconceptions and stereotypes in your subject areas in the classroom (NTS 3m). *E.g. (Social Studies)* *Invite a resource person to draw the attention of teachers and learners to the links between Social Studies and the other subjects.*	
	1.9 Ask teachers to discuss possible activities they would adopt to develop the 21st century skills in their learners (NTS 2c, 3h and 3j).	1.9 Discuss possible activities you would adopt to develop the 21st century skills in your learners (NTS 2c, 3h and 3j).	

	E.g. a) **Communication skills**: *E.g., group discussion providing opportunities for learners to develop oral presentation skills.* b) **Collaboration skills:** *E.g. group projects that will make use of the strengths of learners of different backgrounds.* c) **Observation and enquiry skill:** *E.g., group discussion or project/research work that encourages all learners to experiment with ideas and come up with their own findings.* d) **Creativity and innovation skills**: *E.g. activities that provide opportunities for learners to create variants of given scenarios using their own experiences* e) **Personal development skills**: *E.g. group projects that provide opportunities for learners to take leadership roles irrespective of how they learn*	E.g. a) **Communication skills**: *E.g., group discussion providing opportunities for learners to develop oral presentation skills.* b) **Collaboration skills:** *E.g., group projects that will make use of the strengths of learners of different backgrounds.*	

2. **Planning for teaching, learning and assessment activities for the lesson/s making links to the secondary school curriculum**	2.1 Ask teachers to discuss samples of their lesson plans in their various subject areas that take different learning styles of learners into account (NTS 2e, 3a).
	
	E.g. Sample lesson plan in Social Studies:
	Refer to Social Studies Teaching syllabus 2010 Year 1.
	An example of an outline plan for teaching based on the 2010 SHS Social Studies Syllabus*.
	a) Topic: National Independence and Self- reliance
	b) Sub-topic: Political Independence
	c) Objectives: By the end of the lesson, the learner will be able to;
	   i. explain the term political independence.
	   ii. state at least two reasons why Ghanaians misconstrued the implications of independence.
	d) Relevant Previous Knowledge (RPK): *Learners have been taking part in 6th March activities.*
	e) Introduction: *Discuss with learners what 6th March reminds them of.*
		2.1 Discuss samples of your lesson plans in your various subject areas that take different learning styles of learners into account (NTS 2e, 3a).
		
		E.g. Sample lesson plan in Social Studies:
		Refer to Social Studies Teaching syllabus 2010 Year 1.
		An example of an outline plan for teaching based on the 2010 SHS Social Studies Syllabus*.
		a) Topic: National Independence and Self- reliance
		b) Sub-topic: Political Independence
		c) Objectives: By the end of the lesson, the learner will be able to;
		   i. explain the term political independence.
		   ii. state at least two reasons why Ghanaians misconstrued the implications of independence.
		d) Relevant Previous Knowledge (RPK): *Learners have been taking part in 6th March activities.*
		e) Introduction: *Discuss with learners what 6th March reminds them of.*
			20 mins

	f) Tasks/activities: i. Ask learners to brainstorm the concept of political independence. ii. Put learners in mixed ability groups to discuss whether an independent nation should continue to rely on the colonial masters for their survival. iii. Ask each group to present their findings to the class using variety of resources.	**f) Tasks/activities:** i. Ask learners to brainstorm the concept of political independence. ii. Put learners in mixed ability groups to discuss whether an independent nation should continue to rely on the colonial masters for their survival. iii. Ask each group to present their findings to the class using variety of resources.	
	g) Core Points: i. Political independence means gaining self-rule from a colonial master thus entitling the new nation to govern itself. ii. Some people thought independence was an end in itself and was a time to amass wealth. iii. Some people believed that political independence was an answer to their economic woes.	**g) Core Points:** i. Political independence means gaining self-rule from a colonial master thus entitling the new nation to govern itself. ii. Some people thought independence was an end in itself and was a time to amass wealth. iii. Some people believed that political independence was an answer to their economic woes.	
	h) Core competencies: Critical thinking and problem solving, communication and collaboration, personal development and	**h) Core competencies:** Critical thinking and problem solving, communication and collaboration, personal development and	

	leadership, and digital literacy.	*leadership, and digital literacy.*	
	i) ***Closure:*** *Use leading questions to review the lesson with learners.*	*i)* ***Closure:*** *Use leading questions to review the lesson with learners.*	
	j) ***Evaluation:*** *a) What is political independence?* *b) Explain at least 2 reasons why Ghanaians misconstrued the implications of independence.*	*j)* ***Evaluation:*** *a) What is political independence?* *b) Explain at least 2 reasons why Ghanaians misconstrued the implications of independence.*	
	*Teachers would be guided to tease out the learning outcomes and the learning indicators from the sample lesson plan.	*Teachers would be guided to tease out the learning outcomes and the learning indicators from the sample lesson plan.	
3. **Teaching, learning and assessment** ▶ **Noting opportunities for making *explicit* links to the Secondary School Curriculum** ▶ **Noting opportunities for integrating: GESI & SEL responsiveness, ICT and 21st Century skills**	3.1 Ask teachers to tease out the learning outcomes and the learning indicators from the sample lesson plan (NTS 3h). *E.g.* *LO: Demonstrate understanding of the concept of political independence* *LI 1 Explain the term political independence.* *LI 2 State at least two reasons why Ghanaians misconstrued the implications of independence.*	3.1 Tease out the learning outcomes and the learning indicators from the sample lesson plan (NTS 3h). *E.g.* *LO: Demonstrate understanding of the concept of political independence* *LI 1 Explain the term political independence.*	20 mins

	3.2 Ask teachers to identify activities that promote GESI responsiveness in their sample lesson plans (NTS 3c, 3e, 3f and 3g).	3.2 Review your sample lesson plans to identify activities that promote GESI responsiveness (NTS 3f, 3g).	
	E.g. a) *Classroom arrangement that facilitates interaction among learners.* b) *Mixed ability/gender grouping that encourage collaboration among learners.* c) *Using positive feedback to students especially the disadvantaged.* d) *Use of a local resource person who has defied stereotyping / stigma to succeed in Social Studies, etc.*	E.g. *Classroom arrangement that facilitates interaction among learner, etcs.*	
	3.3 Ask teachers to discuss how the lesson is linked to the use of formative assessment tools and practices, e.g., assessment *for learning* and assessment *as learning* (NTS 3k, 3l). E.g. a) *Learners brainstorm the concept of political independence, and this provides opportunities for reflection and self-assessment (assessment as learning)* b) *Learners work in mixed ability groups to discuss whether an independent nation should continue to rely on the colonial masters for their survival, and*	3.3 Discuss how the lesson is linked to the use of formative assessment tools and practices, e.g., assessment *for learning* and assessment *as learning* (NTS 3k, 3l). E.g. *Learners brainstorm the concept of political independence, and this provides opportunities for reflection and self-assessment (assessment as learning)*	

	this provided opportunities for peer-assessment (assessment for learning) c) *Learners present their findings to the class for peer and teacher feedback (assessment for learning)*	
	3.4 Guide teachers to list and discuss how the lesson could make use of resources to support relevant activities in the NTS (NTS 3j). *E.g.* a) *Pre-recorded videos* b) *Posters/photographs,* c) *OERs/Internet facilities* d) *Projector, etc.*	3.4 List and discuss how the lesson could make use of resources to support relevant activities in the NTS (NTS 3j). *E.g.* *Pre-recorded videos, posters, etc.*	
	3.5 Ask one teacher to model a teaching activity in the sample lesson plan (NTS 1a,3a). **(EXTENSION ACTIVITY)**	3.5 Model a teaching activity in the sample lesson plan (NTS 1a, 3a). **(EXTENSION ACTIVITY)**	

4. **Evaluation and review of session:** ▶ **Identifying and addressing any outstanding issues relating to the lesson/s for clarification** ▶ **Noting that teachers need to identify critical friends to observe lessons and report at next session**	4.1 Ask teachers to reflect and write what they have learnt in the session. 4.2 Ask teachers to share what they have learnt with the larger group. 4.3 Remind teachers to identify a critical friend to observe them in teaching their lessons in relation to PLC Session 8 and provide feedback at the next PLC session. 4.4 Remind teachers to read Session 9 from the PLC Handbook in preparation for the next session.	4.1 Reflect and write what you have learnt in the session. 4.2 Share what you have learnt with the larger group. 4.3 Identify a critical friend to observe you in teaching your lessons in relation to PLC Session 8 and provide feedback at the next PLC session. 4.4 Read Session 9 from the PLC Handbook in preparation for the next session.	10 mins

PLC Session 9: Managing the Learning Environment

	Guidance notes on Leading the session. *What the PLC Coordinator will have to say during each stage of the session*	Guidance Notes on Teacher Activity during the PLC Session. *What teachers will do during each stage of the session.*	Time in session
1. Review of previous session and introduction to new session	1.1 Start the session by asking teachers to share one thing they did differently in the classroom and elsewhere based on the session on *knowledge of learners*, which they think impacted learning positively. 1.2 Ask teachers to discuss and summarise in a single sentence why they think what a colleague did by way of application of lessons learned in the session on *knowledge of educational frameworks and curriculum development*, supported learning.	1.1 Share one thing you did differently in the classroom and elsewhere based on the session on *knowledge of learners*, which you think impacted learning positively. 1.2 Discuss and summarise in a single sentence why you think what a colleague did by way of application of lessons learned in the session on *knowledge of educational frameworks and curriculum development*, supported learning.	30 mins

1. Review of previous session and introduction to new session **NB: The guidance for PLC Coordinator should identify, address and provide explanations for any areas where teachers might require clarification on an aspect of the lesson.** **NB: PLC Coordinator should ask teachers to plan for their teaching as they go through the PLC session.**	1.3 Ask a teacher to read Standards 3a, 3b, 3c and 3d under *Professional Practice* of the NTS and the learning outcomes (LOs) and learning indicators (LIs) of the session to set the stage for the session. LO 1: Demonstrate knowledge and understanding of creating safe and encouraging learning environment (NTS 3c, 3d, 3e and 3f). LI 1.1 Give examples of how to create a warm, friendly and fair environment for teaching and learning (NTS 3c, 3d, 3e and 3f). LI 1.2 Give examples of how to create conducive physical learning environment (NTS 3c, 3d, 3e and 3f). LO 2: Demonstrate knowledge, understanding and skills of planning and delivering varied and challenging lessons showing a grasp of the intended outcomes of teaching (NTS 3e, 3f, 3g and 3j). LI 2.1 Prepare a scheme of learning for the semester bearing in mind GESI (NTS 2b, 2e and 3a). LI 2.2 Prepare a lesson plan showing cross- cutting issues including GESI (NTS 2d, 2f and 3a). LI 2.3 Model the delivery of a planned lesson (NTS 3e, 3g, 3k and 3p). (Extension Activity)	1.3 Read Standards 3a, 3b, 3c and 3d under *Professional Practice* of the NTS and the learning outcomes (LOs) and learning indicators (LIs) of the session to set the stage for the session. LO 1: Demonstrate knowledge and understanding of creating safe and encouraging learning environment (NTS 3c, 3d, 3e and 3f). LI 1.1 Give examples of how to create a warm, friendly and fair environment for teaching and learning (NTS 3c, 3d, 3e and 3f). LI 1.2 Give examples of how to create conducive physical learning environment (NTS 3c, 3d, 3e and 3f). LO 2: Demonstrate knowledge, understanding and skills of planning and delivering varied and challenging lessons showing a grasp of the intended outcomes of teaching (NTS 3e, 3f, 3g and 3j). LI 2.1 Prepare a scheme of learning for the semester bearing in mind GESI (NTS 2b, 2e and 3a). LI 2.2 Prepare a lesson plan showing cross- cutting issues and GESI (NTS 2d, 2f and 3a). LI 2.3 Model the delivery of a planned lesson (NTS 3e, 3g, 3k and 3p). (Extension Activity)	

	LO 3: Demonstrate knowledge, understanding and skills of carrying out action research to improve practices in the learning environment (NTS 3b). LI 3.1 List learners' learning needs identified in the classroom (NTS 3a, 3b and 3m). LI 3.2 Design an instrument for data collection (NTS 3n). LI 3.3 List interventions to solve a problem identified in class (NTS 3a). LI 3.4 Analyse and interpret data collected on teaching and learners' learning needs (NTS 3n). LO 4: Demonstrate knowledge understanding and skills of managing behaviours with small and large class sizes (NTS 3c). LI 4.1 Give examples of how to overcome challenges of teaching large class sizes (NTS 3d). LI 4.2 Give examples of how to manage behaviour in large classes (NTS 3d).	LO 3: Demonstrate knowledge, understanding and skills of carrying out action research to improve practices in the learning environment (NTS 3b). LI 3.1 List learners' learning needs identified in the classroom (NTS 3a, 3b and 3m). LI 3.2 Design an instrument for data collection (NTS 3n). LI 3.3 List interventions to solve a problem identified in class (NTS 3a). LI 3.4 Analyse and interpret data collected on teaching and learners learning needs (NTS 3n). LO 4: Demonstrate knowledge understanding and skills of managing behaviours with small and large class sizes (NTS 3c). LI 4.1 Give examples of how to overcome challenges of teaching large class sizes (NTS 3d). LI 4.2 Give examples of how to manage behaviour in large classes (NTS 3d).	
Give regard for SEL & GESI, ICT, **21^{S}century skills, etc**	1.4 In small groups, ask teachers to discuss acceptable social behaviour that promotes teaching and learning and share with the larger group (NTS 1c, 1d, 1g and 1p). *E.g.* *Obedience, discipline, punctuality, regularity, commitment, respect and hard work, etc.*	1.4 Discuss acceptable social behaviour that promotes teaching and learning and share with the larger class (NTS 1c, 1d, 1g and 1p). *E.g.* *Obedience, etc..*	15 mins

	1.5 In small groups, ask teachers to discuss how to create a warm and friendly environment for effective teaching and learning and ask group leaders to share their findings with the larger group (NTS 3c, 3d and 3h). *E.g.* a) *Teacher being friendly to the learners* b) *Teacher showing love, affection and empathy to the learners* c) *Creating classroom rules together with the learners and making sure learners obey rules and regulations* d) *Encouraging learner to feel free to approach teacher where necessary* e) *Encourage learners tolerate and cooperate with each other* f) *Teacher being GESI responsive in teaching and learning* 1.6 In subject groups, ask teachers to discuss their prepared scheme of learning for the semester/term to find out if GESI, ICT and 21st century skills have been embedded (NTS 1d, 1f and 3g). (Extension Activity)	1.5 In small groups, discuss how to create a warm and friendly environment for effective teaching and learning and share your findings with the larger group (NTS 3c, 3d and 3h). *E.g.* *Teacher being friendly to the learners, etc.* 1.6 In subject groups, discuss your prepared scheme of learning for the semester/term to find out if GESI, ICT and 21st century skills have been embedded (NTS 1d, 1f and 3g). (Extension Activity)	

		E.g. (Science)	E.g. (Science)	
		a) In a practical lesson, both boys and girls should be encouraged to do dissection of rodents. b) In all lessons, both boys and girls as well as SEN learners should be encouraged to show interest in both biological and physical sciences	In a Science practical lesson, both boys and girls should be encouraged to do dissection of rodents, etc..	
		1.7 Using think-pair-share strategy, let teachers come out with various strategies that will be used to manage unacceptable behaviours in large classes (NTS 3d, 3g and 3m). *E.g.* *Disruption avoidance Strategies* a) *Organising classroom environment to suit the learning context, (e.g. rearranging desks for groupwork)* b) *Getting appropriate and adequate teaching learning resources* c) *Ensuring gender equity during teaching and learning. For example, male and female learners including SEN be given equal opportunities during Science practical lesson, etc.*	1.7 Using think-pair-share strategy, come out with various strategies that will be used to manage unacceptable behaviours in large classes (NTS 3d, 3g and 3m). *E.g.* *Disruption avoidance Strategies* a) *Organising classroom environment to suit the learning context, (e.g. rearranging desks for groupwork), etc.*	

	Anticipation Strategies
	   a) *Assigning roles to learners who have tendency of disturbing during teaching and learning*
	   b) *Teachers should use hands-on-activities and task setting, etc.*
	
	Response Strategies
	a) *Use of rewards such as gifts, awarding of extra marks to well behaved students or groups*
	b) *Use of positive reinforcement such as counseling and encouragement, etc.*
		Anticipation Strategies
		   a) *Assigning roles to learners who have tendency of disturbing during teaching and learning, etc.*
		
		Response Strategies
		Use of rewards such as gifts, awarding of extra marks to well behaved students or groups, etc.	

2. Planning for teaching, learning and assessment activities for the lesson/s making links to the secondary school curriculum	2.1 Still in the small groups, ask teachers to list examples of learners' learning needs they can identify in their subject area (NTS 1e, 2c). *E.g. (Science)* a) *Learners' inability to plot graph with coordinates obtained from pendulum experiment* b) *Learners' inability to differentiate between diffusion and osmosis* c) *Learners' inability to understand the concept photosynthesis.* d) *Learners' inability to differentiate between plant cell and animal cell., etc.*	2.1 List examples of learners' learning needs you can identify in your subject area (NTS 1e, 2c). *E.g. (Science)* *Learners' inability to plot graph with coordinates obtained from pendulum experiment, etc.*	15 mins

	2.2 Using think-pair-share, ask teachers to identify instruments they can design to collect data to justify or otherwise, an intervention for the problem they have identified in the classroom during teaching and learning sessions (NTS 3b, 3n). *E.g.* a) *Interview guide* b) *Observation guide checklist* c) *Questionnaire* d) *Analysis of marked exercises/tests/and terminal reports*	2.2 Using think-pair-share, identify instruments that can be designed to collect data to justify or otherwise, an intervention for the problem you have identified in the classroom during teaching and learning sessions (NTS 3b, 3n). *E.g.* *Interview guide, etc.*	
	2.3 Ask teachers to list the appropriate interventions to solve the problem they have identified (NTS 3e). *E.g. (Science)* a) Problem: *Learners' inability to plot graph with coordinates obtained from pendulum experiment* *Intervention: Remediation classes, etc.* b) *Problem: Learners' inability to differentiate between plant cell and animal cell.* *Intervention: Aided research on plant cell and animal cell, etc.*	2.3 List the appropriate interventions to solve the problem you have identified (NTS 3e). *E.g. (Science)* . Problem: *Learners' inability to plot graph with coordinates obtained from pendulum experiment* *Intervention: Remediation classes, etc.*	
	2.4 Ask teachers to prepare a lesson plan for an intervention. This should be based on the 2010 Senior High School Syllabus (NTS 3a, 3j and 3l). (Extension Activity)	2.4 Prepare a lesson plan for an intervention. This should be based on the 2010 Senior High School Syllabus (NTS 3a, 3j and 3l). (Extension Activity)	

	An example of an outline of a lesson plan for an intervention based on the 2010 SHS Integrated Science Syllabus* **Learning need***: learners' inability to differentiate between plant cell and animal cell correctly.*
	
	Intervention*: Re-teaching content*
	
	a) Topic*: Cells*
	
	b) Sub-topic*: Differences between Plant Cell and Animal Cell*
	
	c) Objectives
	By the end of the lesson, the student will be able to:
	   i. Describe the structure of the plant cell.
	   ii. Describe the structure of the animal cell.
	  iii. Differentiate between the plant cell and the animal cell.
	
	d) Relevant Previous Knowledge:
	Learners can explain what a cell is.
	
	e) Introduction:
	Elicit from the learners the meaning of cells using brainstorming.
	Prepare the learners' mind to watch a documentary on plant cell and animal cell.
	
	f) Tasks/activities:
	i. Let learners watch a documentary on plant cell and note salient points on the structure of the plant cell for discussion.
		An example of an outline of a lesson plan for an intervention based on the 2010 SHS Integrated Science Syllabus*
		
		Learning need*: learners' inability to differentiate between plant cell and animal cell correctly.*
		
		Intervention*: Re-teaching content*
		
		a) Topic*: Cells*
		
		b) Sub-topic*: Differences between Plant Cell and Animal Cell*
		
		c) Objectives
		By the end of the lesson, the student will be able to:
		   i. Describe the structure of the plant cell.
		   ii. Describe the structure of the animal cell.
		  iii. Differentiate between the plant cell and the animal cell.
		
		d) Relevant Previous Knowledge:
		learners can explain what a cell is.
		
		e) Introduction:
		Elicit from the learners the meaning of cells using brainstorming.
		Prepare the learners' mind to watch a documentary on plant cell and animal cell.
		
		*f) **Tasks/activities:***
		i. Let learners watch a documentary on plant cell and note salient points on the structure of the plant cell for discussion.	

	ii. Show them a chart of a well labelled diagram of the structure of a plant cell for a discussion. iii. Let learners watch a documentary on animal cell and note salient points on the structure of the animal cell for a discussion. iv. Show them a chart of a well labelled diagram of the structure of Animal cell for a discussion. v. Using small group discussion, let the learners discuss and write the differences they have discovered between plant cell and animal cell. Remind the learners to appoint group leaders and secretaries and let the leaders share the group's work with the larger class. **g) Closure:** Close the lesson by asking learners to reflect on the following questions: a. What new things have you learnt from today's lesson? b. How will today's lesson help you in your daily life activities? **h) Evaluation** 　i. Draw a plant cell and animal cell and label them. 　ii. State 4 differences between plant cell and animal cell. i) Content: Cells are the basic units of life or the building blocks of life. Examples are plant cell and animal cell.	ii. Show them a chart of a well labelled diagram of the structure of a plant cell for a discussion. iii. Let learners watch a documentary on animal cell and note salient points on the structure of the animal cell for a discussion. iv. Show them a chart of a well labelled diagram of the structure of Animal cell for a discussion. v. Using small group discussion, let the learners discuss and write the differences they have discovered between plant cell and animal cell. Remind the learners to appoint group leaders and secretaries and let the leaders share the group's work with the larger class. **g) Closure:** Close the lesson by asking learners to reflect on the following questions: a. What new things have you learnt from today's lesson? b. How will today's lesson help you in your daily life activities? **h) Evaluation** 　i. Draw a plant cell and animal cell and label them. 　ii. State 4 differences between plant cell and animal cell. i) Content: Cells are the basic units of life or the building blocks of life. Examples are plant cell and animal cell.	

	The differences between plant cell and animal cell include the following: i. *Plant cell is surrounded by a rigid cell wall but animal cell does not have a cell wall.* ii. *Plant cell is larger in size but animal cell is smaller in size.* iii. *While plant cell has a large vacuole animal cell has small vacuole.* iv. *Plant cell has plastids but animal cell does not have plastids.* v. *Plant cell does not have cilia however, animal cell has cilia.* vi. *Lysosomes are very rare in plant cell but abundant in animal cell.* vii. *Plant cell does not have centrosome but animal cell has centrosome.* ***j) Core competencies*** i. *Leadership* ii. *Communication* iii. *Collaboration* iv. *Critical thinking* v. *Creativity and innovation*	*The differences between plant cell and animal cell include the following:* i. *Plant cell is surrounded by a rigid cell wall but animal cell does not have a cell wall.* ii. *Plant cell is larger in size but animal cell is smaller in size.* iii. *While plant cell has a large vacuole animal cell has small vacuole.* iv. *Plant cell has plastids but animal cell does not have plastids.* v. *Plant cell does not have cilia however, animal cell has cilia.* vi. *Lysosomes are very rare in plant cell but abundant in animal cell.* vii. *Plant cell does not have centrosome but animal cell has centrosome.* ***j) Core competencies*** i. *Leadership* ii. *Communication* iii. *Collaboration* iv. *Critical thinking* v. *Creativity and innovation*	

	2.5. Ask teachers, in groups, to do a presentation on the prepared lesson plan for feedback from their colleagues (NTS 3a). **(Extension Activity)**	2.5. In groups, do a presentation on the prepared lesson plan fro feedback from your colleagues (NTS 3a). **(Extension Activity)**	
	* *Teachers will be guided to tease out the learning outcomes and the learning indicators from the sample lesson plan.*	*Teachers will be guided to tease out the learning outcomes and the learning indicators from the sample lesson plan.*	
3. Teaching, learning and assessment.	3.1 Ask teachers to tease out the learning outcomes and the learning indicators from the sample lesson plan. *E.g. LO: Demonstrate sound knowledge and understanding of plant cell and animal cell. LI 1.1 Describe the structure of the plant cell. LI 1.2 Describe the structure of the animal cell. LI 1.3 Differentiate between the plant cell and the animal cell, etc..*	3.1 Tease out the learning outcomes and the learning indicators from the sample lesson plan. *E.g. LO: Demonstrate sound knowledge and understanding of plant cell and animal cell. LI 1.1 Describe the structure of the plant cell, etc.*	20 mins
	3.2 Ask teachers to discuss how they will collect post intervention data and share their discussion with the larger group (NTS 1e, 3n). *E.g. Using marked test scores, class exercises, project works, etc.*	3.2 Discuss how you will collect post intervention data and share with the larger group data (NTS 1e, 3n). *E.g. Using marked test scores, etc.*	
	3.3 Ask teachers to describe how they will analyze the post intervention data and interpret it (NTS 3b).	3.3 Describe how you will analyze the post intervention data and interpret it (NTS 3b).	

	E.g. *a) Comparing post and the pre-intervention test scores to identify areas for development, etc.* *b) Use interview data collected to assess areas for development, etc.* 3.4 Ask teachers in groups to identify and discuss ways of overcoming challenges in teaching large class size and share with the larger group for further discussion (NTS 3d). *E.g.* *a) Use of group and pair work in large classrooms* *b) Altering seating plans so that female and male learners are mixed* *c) Managing resources such that all learners get access to resources* *d) Involving learners as monitors* *e) Using peer teaching to improve learning* 3.5 Ask groups to present their work for feedback from the larger group	*E.g.* *Comparing post and the pre-intervention test scores to identify areas for development, etc.* 3.4 In groups, identify and discuss ways of overcoming challenges in teaching large class size and share with the larger group for further discussion (NTS 3d). *E.g.* *Use of group and pair work in large classrooms* 3.5 Present your work for feedback from the larger group	

4. Evaluation and review of session: ▶ **Identifying and addressing any outstanding issues relating to the lesson/s for clarification** ▶ **Noting that teachers need to identify critical friends to observe lessons and report at next session**	4.1 Ask teachers to reflect and write what they have learnt in the session (NTS 1a, 3l and 3n). 4.2 Ask teachers to share what they have written with the larger group. 4.3 Remind teachers to identify a critical friend to observe them in teaching their lessons in relation to PLC Session 9 and provide feedback at the next PLC session. 4.4 Remind teachers to read Session 10 from the PLC Handbook in preparation for the next session.	4.1 Reflect and write what you have learnt in the session (NTS 1a, 3l and 3n). 4.2 Share what you have written with the larger group. 4.3 Identify a critical friend to observe you in teaching your lessons in relation to PLC Session 9 and provide feedback at the next PLC Session. 4.4 Remember to read Session 10 from the PLC Handbook in preparation for the next session.	10 mins

PLC Session 10: Teaching and Learning

	Guidance notes on Leading the session. *What the PLC Coordinator will have to say during each stage of the session*	Guidance Notes on Teacher Activity during the PLC Session. *What teachers will do during each stage of the session*	Time in session
1. Review of previous session and introduction to new session **NB The guidance for PLC Coordinator should identify, address, and provide explanations for any areas where teachers might require clarification on an aspect of the lesson.** **NB PLC Coordinator should ask teachers to plan for their teaching as they go through the PLC session**	1.1 Start the session by asking teachers to share one thing they did differently in the classroom and elsewhere based on the session on *managing the learning environment*, which they think impacted learning positively. 1.2 Ask teachers to discuss and summarise in a single sentence why they think what a colleague did by way of application of lessons learned in the session on *managing the learning environment*, supported learning. 1.3 Ask a teacher to read standard 3e, 3f, 3g, 3h, 3i, 3j, 3k and 3l under *Professional Practice* of the NTS and the learning outcomes (LOs) and learning indicators (LIs) of the session to set the stage for the session. LO 1: Develop a variety of instructional strategies that encourage learners' participation and critical thinking (NTS 3e). LI 1.1 Mention at least three teaching strategies that encourage learners' participation in class. LI 1.2 Mention at least three teaching strategies that encourage learners' critical thinking.	1.1 Share one thing you did differently in the classroom and elsewhere based on the session on *managing the learning environment*, which you think impacted learning positively. 1.2 Discuss and summarise in a single sentence why you think what a colleague did by way of application of lessons learned in the session *managing the learning environment*, supported learning. 1.3 Ask a teacher to read standard 3e, 3f, 3g, 3h, 3i, 3j, 3k and 3l under *Professional Practice* of the NTS and the learning outcomes (LOs) and learning indicators (LIs) of the session to set the stage for the session. LO 1: Develop a variety of instructional strategies that encourage learners' participation and critical thinking (NTS 3e). LI 1.1 Mention at least three teaching strategies that encourage learners' participation in class. LI 1.2 Mention at least three teaching strategies that encourage learners' critical thinking.	30 mins

	LO 2: Employ Gender Equality and Social Inclusive (GESI) responsive activities during teaching and learning (NTS 3f). LI 2.1 State at least four measures a teacher can adopt to be GESI responsive. LI 2.2 Identify and mention at least three categories of learners that require GESI responsive support approaches in teaching and learning the most.	LO 2: Employ Gender Equality and Social Inclusive (GESI) responsive activities during teaching and learning (NTS 3f). LI 2.1 State at least four measures a teacher can adopt to be GESI responsive. LI 2.2 Identify and mention at least three categories of learners that require GESI responsive support approaches in teaching and learning the most.	
	LO 3: Employ teaching strategies appropriate for mixed ability, multilingual, and multi-age classes of learners (NTS 3g). LI 3.1 State at least three teaching strategies that support the teaching of learners from diverse backgrounds. LI 3.2 Identify at least four teaching and learning resources that can be used in teaching learners from different ability groups.	LO 3: Employ teaching strategies appropriate for mixed ability, multilingual, and multi-age classes of learners (NTS 3g). LI 3.1 State at least three teaching strategies that support the teaching of learners from diverse backgrounds. LI 3.2 Identify at least four teaching and learning resources that can be used in teaching learners from different ability groups.	
	LO 4: Discuss meaningful tasks that encourage learner collaboration and lead to purposeful learning (NTS 3h). LI 4.1 List at least four classroom activities that will encourage learners to collaborate during teaching and learning. LI 4.2 List at least three classroom activities that will lead to purposeful learning.	LO 4: Discuss meaningful tasks that encourage learner collaboration and lead to purposeful learning (NTS 3h). LI 4.1 List at least four classroom activities that will encourage learners to collaborate during teaching and learning. LI 4.2 List at least three classroom activities that will lead to purposeful learning.	
	LO 5: Explain concepts clearly using examples familiar to learners.	LO 5: Explain concepts clearly using examples familiar to learners.	

| | | LI 5.1 Mention at least three strategies teachers can adopt to explain key concepts in their lessons (NTS 3i). LI 5.2 Discuss at least two strategies teachers can adopt to explain key concepts in their lessons.

LO 6: Discuss the production and uses of a variety of teaching and learning resources that enhance learning, including Information and Communications Technology (ICT) tools (NTS 3j). LI 6.1 List and discuss at least three ways in which teaching and learning resources can be produced using local resources. LI 6.2 State at least three ways in which teaching and learning resources can be produced using ICT.

1.4 Ask teachers to share with the group, various teaching strategies they have been using to deliver their lessons (NTS 3e). *E.g.* a) *Role-play* b) *Demonstrations* c) *Group discussions* d) *Project work* e) *Flipped classroom, etc.*

1.5. Lead teachers to discuss at least four teaching strategies that encourage learners' critical thinking and participation (NTS 3e, 3g). | LI 5.1 Mention at least three strategies teachers can adopt to explain key concepts in the lessons (NTS 3i). LI 5.2 Discuss at least two strategies teachers can adopt to explain key concepts in their lessons.

LO 6: Discuss the production and uses of a variety of teaching and learning resources that enhance learning, including Information and Communications Technology (ICT) tools (NTS 3j). LI 6.1 List and discuss at least three ways in which teaching and learning resources can be produced using local resources. LI 6.2 State at least three ways in which teaching and learning resources can be produced using ICT.

1.4 Share with the group, various teaching strategies you have been using to deliver your lessons (NTS 3e). *E.g.* *Role-play, etc.*

1.5. Discuss at least four teaching strategies that encourage learners' critical thinking and participation (NTS 3e, 3g). | |
| --- | --- | --- | --- | --- |

		E.g.	E.g.	
		a) *Whole-class dialogue*	*Whole-class dialogue, etc.*	
		b) *Questioning/probing*		
		c) *Group/peer work*		
		d) *Demonstration*		
		e) *Project/enquiry base learning*		
		f) *Story-telling, etc.*		
		1.6 Ask teachers to state at least four measures that they can adopt to be GESI responsive (NTS 3f). *E.g* a) *Classroom arrangement* b) *Even distribution of questions* c) *Provide learning aids appropriate to learners' needs (hearing aids, braille, etc.)* d) *Differentiated teaching, etc.*	1.6. State at least four measures that you can adopt to be GESI responsive (NTS 3f). *E.g* *Classroom arrangement , etc.*	
		1.7 Ask teachers to identify and mention at least three categories of learners that require GESI responsive support approaches in teaching and learning the most (NTS 3g). *E.g* a) *Hearing impaired* b) *Visually impaired* c) *Learners with cerebral palsy* d) *Other vulnerable groups, etc.*	1.7 Identify and mention at least three categories of learners that require GESI responsive support approaches in teaching and learning the most (NTS 3g). *E.g* a) *Hearing impaired* b) *Visually impaired, etc.*	
		1.8 Ask teachers to state at least four strategies that support the teaching of learners from diverse backgrounds (NTS 3e, 3g).	1.8 State at least four strategies that support the teaching of learners from diverse backgrounds (NTS 3e, 3g).	

	E.g.
	a) *Seating arrangement that allows for independent work*
	b) *Same or mixed grade groups*
	c) *Individual self-directed work*
	d) *Differentiated teaching*
	e) *The use of diagrams, charts and other displays, etc.*
	
	1.9 Ask teachers to identify at least four teaching and learning resources that can be used in teaching learners from different ability groups (NTS 3i).
	E.g.
	a) *Audio-visual material*
	b) *Posters*
	c) *Videos*
	d) *Braille*
	e) *Projector*
	f) *Flash cards, etc.*
	
	1.10 Ask teachers to list at least four classroom activities that will encourage learners to collaborate during teaching and learning (NTS 3h).
	E.g.
	a) *Peer learning/ teaching*
	b) *Talk and debate*
	c) *Assigning leadership roles to females and males equally*
	d) *Skillful intervention during learning, etc.*
		E.g.
		Seating arrangement that allows for independent work, etc.
		
		1.9 Identify at least four teaching and learning resources that can be used in teaching learners from different ability groups (NTS 3i).
		E.g.
		  Audio-visual material, etc.
		
		1.10 List at least four classroom activities that will encourage learners to collaborate during teaching and learning (NTS 3h).
		E.g.
		  Peer learning/ teaching, etc.	

	1.11 Ask teachers to mention at least three strategies they can adopt or adapt to explain key concepts in their lessons (NTS 3i). *E.g.* a) *Imaginative use of drawings, diagrams, charts, etc.* b) *Demonstrations* c) *Use of ICT tools* d) *Analogy, etc.*	1.11 Mention at least three strategies you can adopt or adapt to explain key concepts in your lessons (NTS 3i). *E.g.* a) *Imaginative use of drawings, diagrams, charts, etc.* b) *Demonstrations, etc.*	
	1.12 Ask teachers to discuss at least two key strategies they can use to explain key concepts in their lessons (NTS 3i). *E.g.* *Using diagrams, drawing, demonstration, and other teaching and learning resources to explain key concepts in a lesson.*	1.12 Discuss at least two key strategies you can use to explain key concepts in your lessons (NTS 3i). *E.g.* *Using diagrams, etc.*	
	1.13 Ask teachers to list and discuss at least three ways in which teaching and learning resources can be produced using local resources (NTS 3j). *E.g.* a) *Draw on cardboards* b) *Create pictures, charts, flash cards, etc.* c) *Use stones, sticks and bottle tops* d) *Mold clay letters and numbers, etc.*	1.13 List and discuss at least three ways in which teaching and learning resources can be produced using local resources (NTS 3j). *E.g.* *Draw on cardboards, etc.*	

Give regard for possible misconceptions and stereotypes and 21st century skills.	1.14 Ask teachers to identify possible misconceptions and stereotypes in teaching and learning. E.*g.* a) *Female teachers can teach lower-level classes better than male teachers* b) *Male teachers understand lesson delivery better than female teachers* c) *Some female teachers feel that having a special needs child in their class may lead to them giving birth to such children* d) *Some think ICT is meant for males and not for females* e) *ICT tools are difficult to apply in teaching and learning, etc.* 1.15 Discuss with teachers, possible ways to mitigate these misconceptions in teaching and learning in their various subjects.	1.14 Identify possible misconceptions and stereotypes in teaching and learning. E.*g.* *Female teachers can teach lower-level classes better than male teachers, etc.* 1.15 Discuss possible ways to mitigate these misconceptions in teaching and learning in your various subjects.	10 mins

	E.g. *a) Teaching is a profession which requires training irrespective of gender* *b) Invite female and male professionals and experts who have overcome some of these misconceptions to deliver a talk on them* *c) Engage the services of professional psychologists and counsellors to counsel female teachers who may harbour the fear of having children with disability because they teach such children* *d) Invite female ICT experts to have a discussion or engagement with teachers to clear such ICT related misconceptions* *e) Organize orientation programmes for teachers on the use of ICT tools in lesson delivery, etc.*	*E.g.* *Teaching is a profession which requires training irrespective of gender, etc.*	
	1.16 Ask teachers to discuss possible activities they would adopt to develop the following 21st century skills in their learners.	1.16 Discuss possible activities you would adopt to develop the following 21st century skills in your learners.	

	E.g. Communication skills, collaboration, observation and enquiry skills, digital literacy, creativity, personal development skills, etc., can be developed in learners using the following activities; a) group discussion b) project/research c) role-play d) hands-on activities e) extended learning f) presentation g) drama h) field trips i) debates j) quizzes, etc.	E.g. Communication skills, collaboration, observation and enquiry skills, digital literacy, creativity, personal development skills, etc., can be developed in learners using the following activities; a) group discussion b) project/research c) role-play d) hands-on activities, etc.	

2. Planning for teaching, learning and assessment activities for the lesson/s making links to the secondary school curriculum	2.1 Ask teachers to discuss samples of their lesson plans in their various subject areas and link them to the NTS, particularly to teaching and learning (NTS 3e, 3f, 3g, 3h, 3i, 3j, 3k and 3l).
	
	An example of an outline of a Lesson Plan based on the 2010 Senior High School Syllabus in Geography*
	
	a) **Topic**: Rocks
	b) **Sub-topic:** Types of rocks
	c) **Objectives:** By the end of the lesson, the learner will be able to:
	   i. Explain the term "rock"
	   ii. State three types of rocks
	   iii. Give at least two examples each of the types of rocks
		2.1 Discuss samples of your lesson plans in your various subject areas and link them to the NTS, particularly to teaching and learning (NTS 3e, 3f, 3g, 3h, 3i, 3j, 3k and 3l).
		
		An example of an outline of a Lesson Plan based on the 2010 Senior High School Syllabus in Geography*
		
		a) **Topic**: Rocks
		b) **Sub-topic:** Types of rocks
		c) **Objectives:** By the end of the lesson, learners will be able to:
		   i. Explain the term rock
		   ii. State the types of rocks
		   iii. Give at least two examples each of the types of rocks
			20 mins

	d) **RPK:** *learners have seen rocks, stones and sand in their environment*
	
	e) **Introduction:** *Introduce the lesson by giving samples of rocks, stones and sand for learners to observe and come out with their differences and similarities.*
	
	f) **Task/Activities:**
	  i. *With the aid of pictures, drawings of rocks on cardboard, etc., guide learners to brainstorm the meaning of rock*
	  ii. *Using samples of the sand, stones, and rocks, guide learners to identify their differences and similarities and come out with the types of rocks*
	  iii. *Guide learners group the rocks according to their types i.e. igneous rocks (basalt, granite, gabbro), sedimentary rocks (chalk, shale, sandstone) and metamorphic rocks (slate, marble, gneiss)*
		d) **RPK:** *learners have seen rocks, stones and sand in their environment*
		
		e) **Introduction:** *Introduce the lesson by giving samples of rocks, stones and sand for learners to observe and come out with their differences and similarities.*
		
		f) **Task/Activities:**
		  i. *With the aid of pictures, drawings of rocks on cardboard, etc., guide learners to brainstorm the meaning of rock*
		  ii. *Using samples of the sand, stones, and rocks, guide learners to identify their differences and similarities and come out with the types of rocks*
		  iii. *Guide learners group the rocks according to their types i.e. igneous rocks (basalt, granite, gabbro), sedimentary rocks (chalk, shale, sandstone) and metamorphic rocks (slate, marble, gneiss)*	

	g) Core Points:
	Meaning of rock:
	Rocks are aggregates of a solid mineral matter that constitute a significant part of the earth crust or a mass of a stone projecting out of the ground
	Types of rocks and their examples:
	  i. *Igneous rocks e.g. basalt, granite, gabbro,*
	  ii. *Sedimentary rocks e.g. chalk, shale, sandstone*
	  iii. *Metamorphic rocks e.g. slate, marble, gneiss*
	
	h) Core Competencies:
	identification skills, imagination skills, observation skills, collaboration skills, communication skills
	
	i) Closure:
	Review the lesson with learners and allow them to ask for clarification if any
	
	j) Evaluation:
	  i. *Describe what rocks are.*
	  ii. *Mention at least two types of rocks.*
	  iii. *State at least two examples each of the various types of rocks.*
	
	k) Remarks:
	*Teachers would be guided to tease out the learning outcomes and learning indicators from the lesson.
		g) Core Points:
		Meaning of rock:
		Rocks are aggregates of a solid mineral matter that constitute a significant part of the earth crust or a mass of a stone projecting out of the ground
		Types of rocks and their examples:
		  i. *Igneous rocks e.g. basalt, granite, gabbro,*
		  ii. *Sedimentary rocks e.g. chalk, shale, sandstone*
		  iii. *Metamorphic rocks e.g. slate, marble, gneiss*
		
		h) Core Competencies:
		identification skills, imagination skills, observation skills, collaboration skills, communication skills
		
		i) Closure:
		Review the lesson with learners and allow them to ask for clarification if any
		
		j) Evaluation:
		  i. *Describe what rocks are.*
		  ii. *Mention at least two types of rocks.*
		  iii. *State at least two examples each of the various types of rocks.*
		
		k) Remarks:
		*Teachers would be guided to tease out the learning outcomes and learning indicators from the lesson.	

3. Teaching, learning and assessment ▶ **Reading and discussion of the teaching and learning activities noting, addressing, and explaining areas where teachers may require clarification** ▶ **Noting opportunities for making *explicit* links to the Secondary School Curriculum** ▶ **Noting opportunities for integrating: GESI & SEL responsiveness and ICT and 21st C skills on**	3.1 Ask teachers to tease out the learning outcomes and learning indicators from the sample lesson plan and compare their work. *E.g.* *LO: Demonstrate knowledge and understanding of the various types of rocks* *LI 1.1 Explain the term 'rock'.* *LI 1.2 Mention at least two types of rocks* *LI 1.3 Give three examples of igneous rocks, etc.* 3.2 Ask teachers to suggest alternative ways of delivering the sample lesson. *E.g.* a) *Field trips* b) *Small group work* c) *Learner presentations* d) *Use of YouTube/pre-recorded videos* e) *Flipped classroom* *Individual tasks, etc.* 3.3 Ask teachers to review the sample lesson plan and suggest activities that can promote GESI and SEL responsiveness. *E.g.* a) *Plan for differences in learner needs*	3.1 Ask teachers to tease out the learning outcomes and learning indicators from the sample lesson plan and compare their work. *E.g.* *LO: Demonstrate knowledge and understanding of the various types of rocks* *LI 1.1 Explain the term 'rock', etc* 3.2 Ask teachers to suggest alternative ways of delivering the sample lesson. *E.g.* *Small group work, etc.* 3.3 Review the sample lesson plan and suggest activities that can promote GESI and SEL responsiveness. *E.g.* *Plan for differences in learner needs, etc.*	20 mins

	b) Use individual tasks reflecting different learning styles c) Use mixed gender groups to encourage collaboration between male and female learners d) Make reasonable adjustment for SEN learners, etc.	.
	3.4 In groups, ask teachers to suggest other assessment methods that could be used in the sample lesson. E.g. a) Self-assessment b) Peer-assessment c) Portfolio d) Observation e) Quizzes f) Tests g) Assignment h) Project work, etc.	3.4 In groups suggest other assessment methods that could be used in the sample lesson. E.g. a) Self-assessment b) Peer-assessment c) Quizzes d) Test e) Project work, etc.
	3.5 Ask a teacher to model a teaching activity in the sample lesson plan. **(Extension Activity)**	3.5 Model a teaching activity in the sample lesson plan **(Extension Activity)**

4. Evaluation and review of session: ▶ **Identifying and addressing any outstanding issues relating to the lesson/s for clarification** ▶ **Noting that teachers need to identify critical friends to observe lessons and report at next session**	4.1 Ask teachers to reflect and write what they have learnt in the session (NTS 3e, 3f, 3g, 3h, 3i, 3g and 3k). 4.2 Ask them to share what they have written with the larger group. 4.3 Remind teachers to identify a critical friend to observe them in teaching their lessons in relation to PLC Session 10 and provide feedback at the next PLC session. 4.4 Remind teachers to read Session 11 from the PLC Handbook in preparation for the next session.	4.1 Reflect and write what you have learnt in the session (NTS 3e, 3f, 3g, 3h, 3i, 3g and 3k). 4.2 Share what you have written with the larger group. 4.3 Identify a critical friend to observe you in teaching your lessons in relation to PLC Session 10 and provide feedback at the next PLC session. 4.4 Remember to read Session 11 from the PLC Handbook in preparation for the next session.	10 mins

PLC Session 11: Assessment

	Guidance notes on Leading the session. *What the PLC Coordinator will have to say during each stage of the session*	Guidance Notes on Teacher Activity during the PLC Session. *What teachers will do during each stage of the session.*	Time in session
1. Review of previous session and introduction to new session	1.1 Start the session by asking teachers to share one thing they did differently in the classroom and elsewhere based on the session on *teaching and learning*, which they think impacted learning positively. 1.2 Ask teachers to discuss and summarise in a single sentence why they think what a colleague did by way of application of lessons learned in the session on *managing the learning environment,* supported learning.	1.1 Share one thing you did differently in the classroom and elsewhere based on the session on *teaching and learning*, which you think impacted learning positively. 1.2 Discuss and summarise in a single sentence why you think what a colleague did by way of application of lessons learned in the session *managing the learning environment,* supported learning.	30 mins

NB: The guidance for PLC Coordinator should identify, address, and provide explanations for any areas where teachers might require clarification on an aspect of the lesson. **NB: PLC Coordinator should ask teachers to plan for their teaching as they go through the PLC session**	1.2 Introduce Session 10 and ask a teacher to read NTS 3k, 3l, 3m, 3n, 3o and 3p the under *Professional Practice* of the NTS and the learning outcomes (LOs) and learning indicators (LIs) of the session to set the stage for the session. LO 1: Show an understanding of assessment and how teachers can assess learners inside and outside the classroom (NTS 3k). LI 1.1 Discuss the meaning of assessment. LI 1.2 State at least three characteristics of continuous assessment. LO 2: Demonstrate understanding of the purposes of assessment (*assessment for* learning, assessment *as learning,* and assessment *of learning)* (NTS 3k, 3l, 3m, 3n, 3o and 3p). LI 2.1 State how assessment modes are incorporated in teaching and learning. LI 2.2 Describe how the assessment of learners' academic attainment relates to the NTS (NTS 3k, 3l, 3m, 3n, 3o and 3p). LI 2.3 Discuss ways in which continuous assessment can be improved.	1.2 Read NTS 3k, 3l, 3m, 3n, 3o and 3p the under *Professional Practice* of the NTS and the learning outcomes (LOs) and learning indicators (LIs) of the session to set the stage for the session. LO 1: Show an understanding of assessment and how teachers can assess learners inside and outside the classroom (NTS 3k). LI.1.1 Discuss the meaning of assessment. LI 1.2 State at least three characteristics of continuous assessment. LO 2: Demonstrate understanding of the purposes of assessment (*assessment for,* assessment *as* and assessment *of learning)* (NTS 3k, 3l, 3m, 3n, 3o and 3p). LI 2.1 State how assessment modes are incorporated in teaching and learning. LI 2.2 Describe how the assessment of learners' academic attainment relates to the NTS (NTS 3k, 3l, 3m, 3n, 3o and 3p). LI 2.3 Discuss ways in which continuous assessment can be improved.	

	1.3 Ask teachers to discuss the meaning of assessment.
	E.g.
	Assessment is a variety of procedures used to obtain information about learner performance. It involves the measurement and evaluation of learners/learners' traits', potential and actual performance. (Linn & Miller, 2005).
	
	From the meaning, assessment
	  a) *measures learners' present performance*
	  b) *measures learners; future performance*
	  c) *can be used to address gaps in learners' knowledge, etc.*
		1.3 Discuss the meaning of assessment.
		
		E.g.
		Assessment is a variety of procedures used to obtain information about learner performance. It involves the measurement and evaluation of learners/learners 'traits', potential and actual performance. (Linn & Miller, 2005)
		
		From the meaning, assessment
		measures learners' present performance, etc.	

	1.4 Through the use of think- pair-share, guide teachers to state and explain the characteristics of continuous assessment (CA) (NTS 3k). *E.g.* *CA is* a) *diagnostic because it can be used to identify gaps in learning* b) *comprehensive because the purpose is to find out how best to address learning gaps can be determined using different approaches* c) *Formative because it is used to support learning not just measure*	1.4 State and explain the characteristics of continuous assessment (CA) (NTS 3k). *E.g.* *CA is diagnostic because it can be used to identify the gaps in learning etc.*	

	d) *guidance-oriented because it helps both the teacher and learner to achieve set goals , etc.* 1.5 Ask teachers to discuss in groups how assessment purposes are incorporated in teaching and learning (NTS 3k). *E.g.* *Assessment "for" learning is seeking and interpreting evidence by learners and teachers to decide where the learners are in their learning* *Assessment "as" learning is where learners are able to learn by themselves and become aware of how they learn. They reflect on their work on a regular basis usually through self and peer assessment and decide what their next learning will be* *Assessment "of" learning occurs when teachers use evidence of learners' learning to make judgement on learners' achievements against goals and standards (Deluca et al., 2019), etc.*	1.5 Discuss in groups how assessment is incorporated in teaching and learning (NTS 3k). *E.g.* *Assessment "for" learning seeking and interpreting evidence by learners and teachers to decide where the learners are in their learning (Deluca et al., 2019), etc.*	

	1.6 Ask teachers to reflect and write how they have used *assessment for* learning, assessment *as learning* and assessment *of* learning in their various classrooms.
	E.g.
	   a) *Class exercise to check understanding (for)*
	   b) *Asking learners to reflect on their work and indicate the progress they have made (as)*
	   c) *Giving a test and recording the marks as part of assessment for West African Senior School Certificate (WASSCE) (of)*
	   d) *Question and answer session to identify learner needs (for), etc.*
		1.6 Reflect and write how you have used *assessment for*, assessment *as* and assessment *of* in your classroom.
		
		E.g.
		   Class exercise to check understanding (for), etc.	

Give regard for possible misconceptions related to GESI,	1.7 Ask teachers to state the misconceptions surrounding the different types of classroom assessments (NTS 3m).	1.7 State the misconceptions surrounding the different types of classroom assessments (NTS 3m).	10 mins

ICT, 21st century skills, etc.	*E.g.* *a) Boys perform better than girls in classroom assessment because they like competition* *b) Multiple-choice type test is easy to construct* *c) Assessing learners always means testing them* *d) Only teachers can assess learners* *e) Assessment always results in learners obtaining marks or grades, etc.*	*E.g.* *Boys perform better than girls in classroom assessment because they like competition, etc.*	
	1.8 Discuss with teachers, possible ways to mitigate these misconceptions and stereotypes in assessment (NTS 3m). *E.g.* *a) Organise orientation to sensitise teachers on the various assessment purposes* *b) Ask teachers to construct multiple-choice test items* *c) Provide research data on tests where females have done better than males, etc.*	1.8 Discuss possible ways to mitigate these misconceptions and stereotypes in assessment (NTS 3m). *E.g.* *Organise orientation to sensitise teachers on the various assessment purposes, etc.*	
	1.9 Discuss with teachers what they do to ensure equal participation of male and female learners in classroom assessment (NTS 3e).	1.9 Discuss what to do to ensure equal participation of male and female learners in classroom assessment (NTS 3e).	

	E.g.
	   a) Provide opportunities for self-assessment
	   b) Distribute questions in the classroom fairly
	   c) Make adjustment in assessments for SEN learners such as using bigger font sizes and allowing more time for completion of tasks, etc.
		E.g.
		   a) Provide opportunities for self-assessment, etc.	

2. Planning for teaching, learning and assessment activities for the lesson/s making Links to the secondary school curriculum	2.1 Ask teachers to discuss samples of their lesson plans in their respective subjects and link them to the NTS (NTS 3a, 3e, 3g and 3j).
	
	An example of an outline for teaching simultaneous linear equations from the SHS 2010 Mathematics Syllabus*
	   *a) **Topic:** Simultaneous Linear Equations*
	   *b) **Sub-topic:** Graphical Method for solving Linear Equations in two variables*
	
	   *c) **Objectives**: Learners will be able to:*
	     i. Plot points for given linear equation
	     ii. Draw graphs for given linear equation
	     iii. Determine the point of intersection as the solution for two given linear equations.
		2.1 Discuss samples of lesson plans in your subject and link them to the NTS (NTS 3a, 3e, 3g and 3j).
		
		An example of an outline for teaching simultaneous linear equations from the SHS 2010 Mathematics Syllabus*
		
		   *a) **Topic:** Simultaneous Linear Equations*
		   *b) **Sub-topic:** Graphical Method for solving Linear Equations in two variables*
		
		   *c) **Objectives**: Learners will be able to:*
		     i. Plot points for given linear equations
		     ii. Draw graphs for given linear equation
		     iii. Determine the point of intersection as the solution for two given linear equations.
			20 mins

	d) **Relevant previous knowledge:** *Learners can plot points and draw straight lines on a graph.*
	
	e) **Introduction**: *Ask learners to come to the board to plot given points on a graph (Ensure males and females including SEN learners)*
	
	f) **Tasks/activities:**
	  i. *Guide learners to plot points for given linear equations*
	  ii. *In pairs, let learners draw graphs for given linear equations. Move round the tables to observe the learners' activities and provide support where necessary*
	  iii. *Guide learners to determine the point of intersection as the solution set for the two given linear equations*
	  iv. *Lead learners to brainstorm the application of the concept in everyday life.*
		d) **Relevant previous knowledge:** *Learners can plot points and draw straight lines on a graph.*
		
		e) **Introduction**: *Ask learners to come to the board to plot given points on a graph (Ensure males and females including SEN learners)*
		
		f) **Tasks/activities:**
		  i. *Guide learners to plot points for given linear equations.*
		  ii. *In pairs, let learners draw graphs for given linear equations. Move round the tables to observe the learners' activities and provide support where necessary*
		  iii. *Guide learners to determine the point of intersection as the solution set for the two given linear equations*
		  iv. *Lead learners to brainstorm the application of the concept in everyday life.*	

	g) **Core Points:** i. Two equations are said to be simultaneous equations in x and y if there exist a set of values for x and y which can satisfy the two equations at the same time ii. The point of intersection is where the two lines meet and that gives the solution set. h) **Core Competences:** i. Collaboration ii. Observation and enquiry skills iii. Critical thinking and problem solving iv. Personal development, etc. i) **Closure:** *Recap the lesson by asking the various groups to come out with what they have learned from the lesson.* j) **Evaluation:** *Draw graphs for 3x+2y=8 and 4x-3y =5 and use the graph to find the solution set of the two equations.* *Teachers would be guided to tease out the LOs and the LIs from the sample lesson.	g) **Core Points:** i. Two equations are said to be simultaneous equations in x and y if there exist a values for x and y which can satisfy the two equations at the same time ii. The point of intersection is where the two lines meet and that gives the solution set. h) **Core Competences:** i. Collaboration ii. Observation and enquiry skills iii. Critical Thinking and problem solving iv. Personal development, etc. i) **Closure:** *Recap the lesson by asking the various groups to come out with what they have learned from the lesson.* j) **Evaluation:** *Draw graphs for 3x+2y=8 and 4x-3y =5 and use the graph to find the solution set of the two equations.* *Teachers would be guided to tease out the LOs and the LIs from the sample lesson.	

3. Teaching, learning and assessment ▶ **Reading and discussion of the teaching and learning activities noting, addressing, and explaining areas where teachers may require clarification** ▶ **Noting opportunities for making *explicit* links to the Secondary School Curriculum Noting opportunities for integrating: GESI & SEL responsiveness and ICT and 21st C skills**	3.1 Ask teachers to identify gaps in their sample lesson plans and discuss possible ways of addressing them (NTS 1a, 3d, 3e, 3f, 3g and 3m). *Possible gaps*: a) *inadequate prescribed textbooks for mathematics* b) *inadequate teaching learning resources* c) *lack of GESI responsive assessment methods.* ***Possible solutions***: *E.g. Use of:* a) *a library* b) *OERs and other Internet facilities* c) *PLC sessions on GESI and assessment* d) *self and peer assessment strategies, etc*. 3.2 Ask teachers to tease out the learning outcomes and learning indicators from the sample lesson plan. *E.g.* *LO: Demonstrate understanding of Graphical Method for solving Linear Equations in two variables LI 1. Plot points for given linear equations.* *LI 2. Draw graphs for given linear equations.*	3.1 Identify gaps in your sample lesson plans and discuss possible ways of addressing them (NTS 1a, 3d, 3e, 3f, 3g and 3m). ***Possible gaps***: a) *inadequate prescribed textbooks for mathematics* b) *inadequate teaching learning resource* c) *lack of GESI responsive assessment methods.* ***Possible solutions***: *E.g. Use of:* a) *a library* b) *OERs and other Internet facilities* 3.2 Tease out the learning outcomes and learning indicators from the sample lesson plan. *E.g.* *LO: Demonstrate understanding of Graphical Method for solving Linear Equations in two variables LI 1. Plot points for given linear equations., etc.*	20 mins

	LI 3. Determine the point of intersection as the solution for two given linear equations.	
	3.3 Ask teachers to suggest alternative ways of delivering the sample lesson plan (NTS 2e).	3.3 Suggest alternative ways of delivering the sample lesson plan (NTS 2e).
	E.g. *Use of:*	E.g.
	a) *flipped classroom, i.e. form of blended learning requiring readings at home and work on live problem solving during class time*	*Use of flipped classroom, i.e., form of blended learning requiring readings at home and work on live problem solving during class time*
	b) *demonstration*	
	c) *simulation*	
	d) *application of simultaneous linear equation in real life., etc.*	
	3.4 Ask teachers to review their sample lesson plans to identify activities that promote GESI responsiveness (NTS 2e).	3.4 Review your sample lesson plans to identify activities that promote GESI responsiveness (NTS 2e).
	E.g.	E.g.
	a) *Classroom arrangement that facilitates mixed-gender interaction as appropriate,*	*Classroom arrangement that facilitates mixed-gender interaction as appropriate, etc.*
	b) *Mixed ability/gender groupings*	
	c) *Opportunities for self-reflection, etc.*	
	d) *Giving positive feedback to learners especially the disadvantaged*	
	e) *Using gender and Special Education Need (SEN) sensitive language and examples, etc.*	

	3.5 Ask teachers to discuss how the sample lesson can be linked to the use of assessment *for learning*, assessment *as learning* and assessment *of learning* (NTS 3k).
	
	E.g.
	    a) *Question and answer method promotes assessment for learning*
	    b) *Marking own work is an example of assessment as learning*
	    c) *Getting peers to mark work promotes assessment for learning*
	    d) *Presentation of the assessment for grading towards WASSCE is an example of assessment of learning, etc.*
	
	3.6 Ask one teacher to model a teaching activity in the sample lesson for feedback from the group, taking into consideration GESI, SEL ICT and 21st century skills (NTS 3f, 3p).
	(EXTENSION ACTIVITY)
		3.5 Discuss how the sample lesson can be linked to the use of assessment *for learning*, assessment *as learning* and assessment *of learning* (NTS 3k).
		
		E.g.
		    Question and answer method promotes assessment for learning, etc.
		
		3.6 a teaching activity in the sample lesson for feedback from the group, taking into consideration GESI, SEL ICT and 21st century skills (NTS 3f, 3p)
		(EXTENSION ACTIVITY)	

4 Evaluation and review of session: ▶ **Identifying and addressing any outstanding issues relating to the lesson/s for clarification** ▶ **Noting that teachers need to identify critical friends to observe lessons and report at next session**	4.1 Ask teachers to reflect and write what they have learnt in the session using the "Talk-to-the-hand" strategy (teacher place their palm on a sheet of paper and trace the fingers out, and in each finger, write the key thing they have learnt) (NTS 3e). 4.2 Ask them to share their reflections with the larger group (NTS 1a). 4.3 Remind teachers to identify a critical friend to observe them while they teach their lesson in relation to PLC Session 11 and provide feedback at the next PLC session (NTS 3l). 4.4 Remind teachers to read Session 12 of the PLC Handbook in preparation for the next session (NTS 3a).	4.1 Reflect and write what you have learnt in the session using the "Talk-to-the-hand" strategy (teacher place their palm on a sheet of paper and trace the fingers out, and in each finger, write the key thing they have learnt) (NTS 3e). 4.2 Share your reflections with the larger group (NTS 1a). 4.3 Identify a critical friend who observed you teach your lesson in relation to PLC Session 11 and provide feedback at the next PLC session (NTS 3l). 4.4 Remember to read Session 12 from the PLC Handbook in preparation of the next session (NTS 3a).	10 mins

PLC Session 12: Training needs of teachers

	Guidance notes on Leading the session. *What the PLC Coordinator will have to say during each stage of the session*	Guidance Notes on Teacher Activity during the PLC Session. *What teachers will do during each stage of the session.*	Time in session
1. Review of previous session and introduction to new session NB: The guidance for PLC Coordinator should identify, address, and provide explanations for any areas where teachers might require clarification on an aspect of the lesson.	1.1 Start the session by asking teachers to share one thing they did differently in the classroom and elsewhere based on the session on *teaching and learning*, which they think impacted learning positively.	1.1 Share one thing you did differently in the classroom and elsewhere based on the session on *teaching and learning*, which you think impacted learning positively.	30 mins
	1.2 Ask teachers to discuss and summarise in a single sentence why they think what a colleague did by way of application of lessons learned in the session on *assessment*, supported learning.	1.2 Discuss and summarise in a single sentence why you think what a colleague did by way of application of lessons learned in the session on *assessment*, supported learning.	
	1.3 Ask a teacher to read the learning outcomes (LOs) and learning indicators (LIs) below to set the stage for the session.	1.3 Read the learning outcomes (LOs) and learning indicators (LIs) below to set the stage for the session.	
NB PLC Coordinator should ask teachers to plan for their teaching as they go through the PLC session	LO 1: Demonstrate knowledge in Professional Portfolio (PP) development and action research in the classroom. LI 1.1 Identify items to be included in the PP. LI 1.2 Give examples of the issues in the classroom that need action research to address.	LO 1: Demonstrate knowledge in Professional Portfolio (PP) development and action research in the classroom. LI 1.1 Identify items to be included in the PP. LI 1.2 Give examples of the issues in the classroom that need action research to address.	

		LO 2: Demonstrate knowledge and understanding of the key GES policies.	LO 2: Demonstrate knowledge and understanding of the key GES policies.	
		LI 5.1 State at least three policies of GES.	LI 5.1 State at least three policies of GES.	
		LI 5.2 Analyse at the relevance of at least three key GES policies.	LI 5.2 Analyse at the relevance of at least three key GES policies.	
		LO 6: Demonstrate knowledge and understanding of leadership for learning.	LO 6: Demonstrate knowledge and understanding of leadership for learning.	
		LI 6.1 State at least three qualities of a good leader.	LI 6.1 State at least three qualities of a good leader.	
		LI 6.2 Analyse at least three leadership styles.	LI 6.2 Analyse at least three leadership styles.	
		1.4 As teachers, in groups, to discuss the various ranks in the GES listed in the NTS for general discussion. *E.g., Rank 1, Rank 2, Rank 3, Rank 4, Rank 5 and Rank 6.*	1.4 In groups, discuss the various ranks in the GES listed in the NTS for general discussion. *E.g., Rank 1, Rank 2, Rank 3, Rank 4, Rank 5 and Rank 6.*	
		1.5 Ask teachers to identify at least 5 items in the teacher's professional portfolio that can be used as evidence of working to the NTS (NTS 1b). *E.g.* *a) Assignments* *b) Reflective practice* *c) Lesson notes* *d) Teaching philosophy* *e) Photographs, etc.*	1.5 Identify at least 5 items in the teacher's professional portfolio that can be used as evidence of working to the NTS (NTS 1b). *E.g.* *Assignments, etc.*	
		1.6 Ask teachers to state the common competency requirements for all 6 ranks of the GES (NTS 1b). *E.g.* *a) Guide teachers under their*	1.6 State the common competency requirements for all 6 ranks of the GES (NTS 1b). *E.g.* *Guide teachers under their supervision on*	

	supervision on ethical, legislative, administrative and organizational requirements as a teacher. b) Demonstrate commitment and enthusiasm to the work and show respect for the students and stakeholder	ethical, legislative, administrative and organizational requirements as a teacher.	
	1.7 Ask teachers to write some of the issues in the classroom that can trigger action research (NTS 3b,3c). E.g. a) Absenteeism b) Indiscipline c) Performance issues d) Weak skills, etc.	1.7 Write some of the issues in the classroom that can trigger action research (NTS 3b, 3c). E.g. Absenteeism, etc.	

	1.8 Ask teachers, in groups, to identify training activities for teachers at the various GES ranks, as indicated in the NTS, that can support teaching and learning in secondary schools.
	E.g.
	  Rank 1
	  a) Portfolio writing/development
	  b) Action research in classroom teaching and learning
	Rank 2
	a) Mentoring and coaching skills
	b) Leadership for learning skills
		1.8 Identify training activities for teachers at the various GES ranks, as indicated in the NTS, that can support teaching and learning in secondary schools
		
		E.g.
		  Rank 1 Portfolio writing/development
		
		Rank 2
		Mentoring and coaching skills	

	Rank 3 a) *Examination item writing and management* b) *School curriculum and policy development and reviews* *Rank 4* a) *Integrating ICT and other technologies in school administration and governance* b) *Leadership for learning* *Rank 5* a) *Knowledge of procurement laws* b) *Knowledge of GES and MoE organograms and working principles* *Rank 6* a) *Strategic planning and management in education* b) *Communication skills (oral and written) for dealing with policy makers and writing policy document and memoranda*	*Rank 3* *Examination item writing and management* *Rank 4* *Integrating ICT and other technologies in school administration and governance* *Rank 5* a) *Knowledge of procurement laws* *Rank 6* *Strategic planning and management in education*	
	1.9 Ask teachers, in groups of different areas of specialization (making sure female and male teachers are appropriately represented in each group, where applicable), to identify specific Standards of the NTS that seek to address the training needs of teachers in various ranks of the GES.	1.9 Identify specific Standards of NTS that seek to address the training needs of teachers in various ranks of the GES.	

	Note: *See the training needs listed in the appendix of the NTS and identify the Standards that can address them.* 1.10 Ask teachers to write at least four competences of a good leader that are capable of helping to address the training needs of teachers in the various ranks of the GES (NTS 1c, 1f and 1g). *E.g.* *a) Ranks 2 Leader- Ability to guide teachers under their supervision to demonstrate attitudes expected of teachers and model such exemplary attitude by themselves* * b) Rank 3 Leaders – Ability to use professional development activities and identify the one that addresses their challenges and those of their colleagues* *c). Rank 4 Leader – Ability to support and facilitate implementation and quality assurance/ improvement of CPD for other teachers in their school, circuit or district*	*Note:* *See the training needs listed in the appendix of the NTS and identify the Standards that can address them.* 1.10 Write at least four competences of a good leader that are capable of helping to address the training needs of teachers in the various ranks of the GES (NTS 1c, 1f and 1g). *E.g.* *Ranks 2 Leader- Ability to guide teachers under their supervision to demonstrate attitudes expected of teachers and model such exemplary attitude by themselves*	
2. Planning for teaching, learning and assessment activities for the lesson/s making links to secondary school curriculum	2.1 Ask teachers to discuss samples of their lesson plans in their respective subject areas and link them to the NTS (NTS 3a, 3b and 3e). ***Sample of lesson outline in Social Studies:*** *An example of an outline*	2.1 Discuss samples of your lesson plans in your respective subject areas and link them to the NTS (NTS 3a, 3b and 3e). ***Sample of lesson outline in Social Studies:*** *An example of an outline*	20mins

	plan for teaching based on the 2010 SHS Social Studies Syllabus*. a) **Topic:** *The role of the individual in a community development* b) **Sub-topic:** *Levels of community and community development* c) **Objectives**: *By the end of the lesson, the learner will be able to;* i. *identify the levels of community,* ii. *explain at least four ways by which an individual can contribute to the development of their community.* d) **RPK:** *Learners have been taking part in communal labour.* e) **Introduction:** *Ask learners to mention things they have observed during communal labour.* f) **Teacher and learner activities:** i. *Students undertake a case study of the community development project and present their findings.* ii. *Students brainstorm to come up with ways an individual can contribute to the development of their community.* g) **Core points:** i. *A community is a group of people living in a locality.*	*plan for teaching based on the 2010 SHS Social Studies Syllabus*.* a) **Topic:** *The role of the individual in a community development* b) **Sub-topic:** *Levels of community and community development* c) **Objectives**: *By the end of the lesson, the learner will be able to;* i. *identify the levels of community,* ii. *explain at least four ways by which an individual can contribute to the development of their community.* d) **RPK:** *Learners have been taking part in communal labour.* e) **Introduction:** *Ask learners to mention things they have observed during communal labour.* f) **Teacher and learner activities:** i. *Students undertake a case study of the community development project and present their findings.* ii. *Students brainstorm to come up with ways an individual can contribute to the development of their community.* g) **Core points:** i. *A community is a group of people living in a locality. The*	

| | | *The group has common values, interest, enduring ties, frequent interactions and a sense of closeness.* | *group has common values, interest, enduring ties, frequent interactions and a sense of closeness.* | |
| ii. | *The levels of community include: neighbourhood, village, town, district/municipal/ metropolitan, regional and national.* | ii. | *The levels of community include: neighbourhood, village, town, district/municipal/ metropolitan, regional and national.* |

ii. *The levels of community include: neighbourhood, village, town, district/municipal/ metropolitan, regional and national.*

iii. **How to contribute to community development**
  1. *Attending communit y meetings*
  2. *Volunteer to help at a local event hosted by the community*
  3. *Volunteer time for a committee that helps with community development, etc.*

iii. **How to contribute to community development**
  1. *Attending communit y meetings*
  2. *Volunteer to help at a local event hosted by the community*
  3. *Volunteer time for a committee that helps with community development, etc.*

h) **Core competencies:**
  i. *Personal development and leadership*
  ii. *Communication and collaboration*
  iii. *Critical thinking and problem solving*

h) **Core competencies:**
  i. *Personal development and leadership*
  ii. *Communication and collaboration*
  iii. *Critical thinking and problem solving*

i) **Conclusion:** *Elicit responses from learners about what they have learnt from lesson through questioning and answering technique.*

j) **Evaluation:**
  i. *What is community?*
  ii. *State 3 ways an individual can*

i) **Conclusion:** *Elicit responses from learners about what they have learnt from lesson through questioning and answering technique.*

j) **Evaluation:**
  iii. *What is community?*
  iv. *State 3 ways an individual can*

	contribute to the development of his/ her community. *Teachers would be guided to tease out the learning outcomes and learning indicators from the lesson.	contribute to the development of his/ her community. *Teachers would be guided to tease out the learning outcomes and learning indicators from the lesson.	
3. Teaching, learning and assessment ▶ **Reading and discussion of the teaching and learning activities noting, addressing, and explaining areas where teachers may require clarification** ▶ **Noting opportunities for making *explicit* links to the Secondary School Curriculum** ▶ **Noting opportunities for integrating: GESI responsiveness and ICT and 21st C skills**	3.1 Ask teachers to identify gaps in their sample lesson plans and discuss possible ways of addressing same (NTS 3a). *E.g.* a) ***Possible gaps:*** *Inadequate teaching and learning resources.* ***Possible Solution****: Online search for resources.* b) ***Possible gaps:*** *Not integrating technology in the enactment of the plan.* ***Possible Solution****: Use videos and PowerPoint slides as appropriate* *3.2* Ask teachers to tease out the learning outcomes and the learning indicators from the sample lesson plan and compare these with the objectives (NTS 3h). *E.g.* *LO: Demonstrate knowledge and understanding in the levels of community and community development.*	3.1 Identify gaps in your sample lesson plans and discuss possible ways of addressing same (NTS 3a). *E.g.* ***Possible gaps:*** *Inadequate teaching and learning resources.* ***Possible Solution****: Online search for resources* 3.2 Tease out the learning outcomes and the learning indicators from the sample lesson plan and compare these with the objectives (NTS 3h). *E.g.* *LO: Demonstrate knowledge and understanding in the levels of community and community development.*	30 mins

	LI 1.1 Identify the levels of community. *LI 1.2 Explain at least four ways by which an individual can contribute to the development of their community, etc.*	*LI 1.1 Identify the levels of community*, *etc.*	
	3.3 Ask teachers to identify and discuss ways the lessons could be taught using creative approaches and making the lesson ICT mediated and GESI responsive. E.g. *a) teach using PowerPoint* *b) providing opportunities for both male and female students to participate fully in the lesson* *c) making reasonable adjustment so that disadvantaged learners can benefit from the lesson*	3.3 Identify and discuss ways the lessons could be taught using creative approaches and making the lesson ICT mediated and GESI responsive. E.g. *Teach using PowerPoint*	
	3.4 Ask teachers to write how the NTS will help to promote the delivery of lessons in the secondary school curriculum (NTS 2b, 2d). E.g. a) *By highlighting the way in which lessons are to be delivered effectively* b) *By indicating the training needs of teachers at the lower ranks of the GES where classroom teaching is the teacher's main work*	3.4 Write how the NTS will help to promote the delivery of lessons in the secondary school curriculum (NTS 2b, 2d). E.g. *By highlighting the way in which lessons are to be delivered effectively*	

	3.5 Ask teachers to state alternative ways of delivering the sample lesson plan (NTS 3a, 3e and 3g). *E.g.* Use of a) *flipped classroom,* b) *extended learning,* c) *demonstration,* d) *field trips/community walk,* e) *work-based learning,* *etc.*	3.5 State alternative ways of delivering the sample lessons plan (NTS 3a, 3e and 3g). *E.g.* Use of *flipped classroom,*	
	3.6 Ask teachers to discuss how the session is linked to the use of formative assessment tools and practices (NTS 3k, 3l). *E.g.* a) *Assessment for learning and assessment as learning should be encouraged* b) *Use of well-constructed marking schemes, etc.*	3.6 Discuss how the session is linked to the use of formative assessment tools and practices (NTS 3k, 3l). *E.g.* *Assessment for learning and assessment as learning should be encouraged, etc.*	
	3.7 Ask teachers to brainstorm the sources of support and resources teachers need to enable them to improve their teaching. *E.g.* a) *Professional Learning Community sessions* b) *Posters* c) *Pictures* d) *Further reading* e) *Online support (e.g. YouTube lessons)* f) *Further studies, etc.*	3.7 Brainstorm the sources of support and resources teachers need to enable them to improve their teaching. *E.g.* *Professional Learning Community sessions, etc.*	
	3.8 Ask one teacher to model a teaching activity in the sample lesson plan (NTS 1a, 3a). **(EXTENSION ACTIVITY)**	3.8 Model a teaching activity in the sample lesson plan (NTS 1a, 3a). **(EXTENSION ACTIVITY)**	

4. Evaluation and review of session: ▶ Teachers need to identify critical friends to observe lessons and report at next session ▶ Identifying and addressing any outstanding issues relating to the lesson/s for clarification	4.1 Ask teachers to reflect and write what they have learned in the session. 4.2 Ask teachers to share what they have learned in the session with the larger group. 4.3 Ask teachers to reflect and write what they have learned from PLC Session 1 to Session 11 4.4 Remind teachers to identify a critical friend to observe them in teaching their lessons in relation to PLC Session 12 and provide feedback to them.	4.1 Reflect and write what you have learned in the session. 4.2 Share what you have learned in the session with the larger group. 4.3 Reflect and write what you have learned from PLC Session 1 to Session 11 4.4 Remember to identify a critical friend to observe you in teaching your lessons in relation to PLC Session 12 and provide feedback to you.	15 mins

TVET PLC Session 5: Professional Development

TVET Domain

1. Agricultural Science
2. Home Economics
3. Technical Skills
4. Visual Art

	Guidance notes on Leading the session. *What the PLC Coordinator will have to say during each stage of the session*	Guidance Notes on Teacher Activity during the PLC Session. *What teachers will do during each stage of the session.*	Time in session
1. Review of previous session and introduction of new session	1.1 Start the session by asking teachers to share one thing they did differently in the classroom and elsewhere based on the session on *the National Teachers' Standards*, which they think impacted learning positively. 1.2 Ask teachers to discuss and summarise in a single sentence why they think what a colleague did by way of application of lessons learned in the session on *gender equality and social inclusion*, supported learning.	1.1 Share one thing you did differently in the classroom and elsewhere based on the session on *the National Teachers' Standards*, which you think impacted learning positively. 1.2 Discuss and summarise in a single sentence why you think what a colleague did by way of application of lessons learned in the session on *gender equality and social inclusion*, supported learning.	30 mins

NB The guidance for PLC Coordinator should identify, address, and provide explanations for any areas where teachers might require clarification on an aspect of the lesson. **NB PLC Coordinator should ask teachers to plan for their teaching as they go through the PLC session**	1.3 Ice breaker activity: *Either use:* ***The Allegory of the Tailless Monkey*** There lived a happy community of monkeys in the *Nunya* forest. One day a middle-aged sanguine monkey called *Blekpo* ventured out of the forest into a large farm. To his joyful surprise, he saw many new things he had never seen before. The air was fresh and the land was flat with very few trees. There was a lot of space to run and jump as much as he could. He sighed with excitement, 'what a freedom! 'At last I am free. I can do whatever I like without the disruption from those old clumpy folks who think they have seen it all. When I get back and tell my experience, the old fools will keep quiet because they will know that they do not have monopoly over experience'. Soon he was all over the place, jumping and climbing the yam poles from one yam mound to another. Unfortunately, he got his head trapped in the farmer's trap. Seeing that he was going to die, he managed to exchange his tail with his head, Having lost his tail in the process, he sneaked back into the forest shamefully. He began to feel odd and lonely because he was the only one without a tail. Cunningly, he decided to	1.3 Ice breaker activity: *Either use:* ***The Allegory of the Tailless Monkey*** There lived a happy community of monkeys in the *Nunya* forest. One day a middle-aged sanguine monkey called *Blekpo* ventured out of the forest into a large farm. To his joyful surprise, he saw many new things he had never seen before. The air was fresh and the land was flat with very few trees. There was a lot of space to run and jump as much as he could. He sighed with excitement, 'what a freedom! 'At last I am free. I can do whatever I like without the disruption from those old clumpy folks who think they have seen it all. When I get back and tell my experience, the old fools will keep quiet because they will know that they do not have monopoly over experience'. Soon he was all over the place, jumping and climbing the yam poles from one yam mound to another. Unfortunately, he got his head trapped in the farmer's trap. Seeing that he was going to die, he managed to exchange his tail with his head, Having lost his tail in the process, he sneaked back into the forest shamefully. He began to feel odd and lonely because he was the only one without a tail. Cunningly, he decided to trick other monkeys also to cut off their	

	trick other monkeys also to cut off their tails so they can become equal. As a good orator his ideas began to gain grounds and many young monkeys were willing to cut off their tails as he suggested. *Abrewaa* the oldest female monkey in the *Nunya* forest who herself had survived many disasters saw everything that happened to troublesome monkey, *Blekpo,* that faithful day. She was on her own lookout for her naughty grandson who also went on adventure in the forest that day. She called a meeting of all the monkeys and narrated all that had happened to the tailless monkey. He explained that, every monkey's agility to climb is in its tail, hence the tail cannot be a nuisance as *Blekpo* was making it look like. She warned that monkeys will be unable to escape as fast as they need should they chop off their tails. Having shared many experiences, *Abrewaa* succeeded in persuading the younger monkeys from cutting off their tails. a) What lesson have you learnt from this story? b) What saved the other monkeys that were going	tails so they can become equal. As a good orator his ideas began to gain grounds and many young monkeys were willing to cut off their tails as he suggested. *Abrewaa* the oldest female monkey in the Nunya forest who herself had survived many disasters saw everything that happened to troublesome monkey, *Blekpo,* that faithful day. She was on her own lookout for her naughty grandson who also went on adventure in the forest that day. She called a meeting of all the monkeys and narrated all that had happened to the tailless monkey. He explained that, every monkey's agility to climb is in its tail, hence the tail cannot be a nuisance as *Blekpo* was making it look like. She warned that monkeys will be unable to escape as fast as they need should they chop off their tails. Having shared many experiences, *Abrewaa* succeeded in persuading the younger monkeys from cutting off their tails. a) What lesson have you learnt from this story? b) What saved the other monkeys that were going to	

	to chop off their tails as a result of the deception? c) How can you relate this story to the PLC sessions? Or Begin the session by asking teachers to mention what they know about the National Teachers' Standards (NTS) 1.4 Ask a teacher who observed a lesson of a critical friend to share their findings with the group (NTS 1a, 1e). 1.5 Ask a teacher to read NTS 1a, 1b, and 1c and tease out the learning outcomes (LOs) and learning indicators (LIs) of the session and compare with the LOs and LIs listed below. LO 1: Demonstrate ability to critically and collectively improve teaching and learning. LI 1.1 Reflect on one's own practice. LI 1.2 Reflect and critique one's own and peers' practice using lesson notes, reflective log, reflective journals, portfolios, etc. LO 2: Demonstrate knowledge, skill and willingness to improve personal and professional development through lifelong learning and continuous professional development.	chop off their tails as a result of the deception? c) How can you relate this story to the PLC sessions? Or Begin the session by asking teachers to mention what they know about the National Teachers' Standards (NTS) 1.4 Share your findings of the lesson you observed your critical friend teach after the last PLC session (NTS 1a, 1e). 1.5 Read NTS 1a, 1b, and 1c and tease out the learning outcomes (LOs) and learning indicators (LIs) of the session. and compare with the LOs and LIs listed below. LO 1: Demonstrate ability to critically and collectively improve teaching and learning. LI 1.1 Reflect on one's own practice. LI 1.2 Reflect and critique one's own and peers' practice using lesson notes, reflective log, reflective journals, portfolios, etc. LO 2: Demonstrate knowledge skill and willingness to improve personal and professional development through lifelong learning and continuous professional development.	

		LI 2.1 Identify gaps in knowledge that can impede personal development.	LI 2.1 Identify gaps in knowledge that can impede personal development.	
		LI 2.2 Identify gaps in knowledge that can impede professional development.	LI 2.2 Identify gaps in knowledge that can impede professional development.	
		LO 3: Demonstrate skill in effective leadership both in the classroom and wider school community.	LO 3: Demonstrate skill in effective leadership both in the classroom and wider school community.	
		LI 3.1 Model GESI compliant qualities in the classroom and beyond.	LI 3.1 Model GESI compliant qualities in the classroom and beyond.	
		LI 3.2 Show high quality of attendance and punctuality to class and meetings.	LI 3.2 Show high quality of attendance and punctuality to class and meetings.	
		LI 3.3 Delegate roles to all learners equally irrespective of gender or ability.	LI 3.3 Delegate roles to all learners equally irrespective of gender or ability.	
		LI 3.4 Attend and contribute meaningfully to school, Parent-Teacher Association/Parent Association and other relevant community meetings.	LI3.4 Attend and contribute meaningfully to school, Parent-Teacher Association/Parent Association and other relevant community meetings.	
		LI 3.5 Avoid exploiting the vulnerability of both male and female learners including SEN.	LI 3.5 Avoid exploiting the vulnerability of both male and female learners including SEN.	
		LI 3.6 Comply with Ministry of Education (MoE) and Ghana Education Service (GES) Ethical Codes.	LI 3.6 Comply with Ministry of Education (MoE) and Ghana Education Service (GES) Ethical Codes.	
		LI 3.7 Volunteer to perform roles that will lead to the growth and	LI 3.7 Volunteer to perform roles that will lead to the growth and development	

	development of learners, the school and the wider community.	of learners, the school and the wider community.	
	1.6 Ask teachers to discuss the relationship between the LOs and the LIs.	1.6 Discuss the relationship between the LOs and the LIs.	
	Note: LO is *the expected knowledge, understanding, skills, etc. to be acquired at the end of a lesson,* LI *is the practical evidence that learning has taken place. It may include verbal responses, practical activity or products.*	**Note:** LO is *the expected knowledge, understanding, skills, etc. to be acquired at the end of a lesson,* LI *is the practical evidence that learning has taken place. It may include verbal responses, practical activity or products.*	
	1.7 Ask teachers to discuss and relate the concept of Professional Development to their various TVET domains. *E.g.* *Professional development refers to continuing education and career training after a person has entered the workforce in order to help them develop new skills, stay up to date on current trends and advance their career* (NTS 2c, 3j).	1.7 Discuss and relate the concept of Professional Development to their various TVET domains. *E.g.* *Professional development refers to continuing education and career training after a person has entered the workforce in order to help them develop new skills, stay up to date on current trends and advance their career* (NTS 2c, 3j).	
	Ref. https://www.webce.com (retrieved 24/03/2022) 1.8 Ask teachers to identify further areas of professional development that will enhance their teaching.	Ref. https://www.webce.com (retrieved 24/03/2022) 1.8 Identify further areas of professional development that will enhance your teaching.	

	E.g. *Short courses such as cake making, exterior and interior decoration, exhibitions, training in the use of agrochemicals, fish farming, art association meetings, courses in ICT, etc.*, (NTS 1b, 3m).	*E.g.* *Short courses such as cake making, exterior and interior decoration, exhibitions, fish farming, art association meetings, courses in ICT,* etc., (NTS 1b, 3m).	
Give regard for misconceptions and stereotypes, GESI, ICT, 21ˢᵗ century skills, etc.	1.9 Ask teachers to identify possible misconceptions and stereotypes in TVET. *E.g.* a) *TVET is for learners with low IQ.* b) *Some TVET domains are gender specific, e.g,. Agriculture for males Home Economics for females, Technical and Visual Art, etc.* c) *TVET is not suitable for SEN student.* d) *iv. TVET is expensive,* (NTS 2f, 3f and 3m). 1.10 Ask teachers to discuss the possible ways of mitigating these misconceptions and stereotypes in TVET in the classroom and elsewhere. *E.g.* a) *Invite role models/resource persons that have overcome these stereotypes and have achieve successes in the TVET domains in the society to interact with learners*	1.9 Identify possible misconceptions and stereotypes in TVET. *E.g.* *TVET is for learners with low IQ.* 1.10 Discuss possible ways of mitigating these misconceptions and stereotypes in TVET in the classroom and elsewhere. *E.g.* *Invite role models/resource persons that have overcome these stereotypes and have achieve successes in the TVET domains in the society to interact with learners*	10 mins

	b) *Use a pre-recorded videos of persons who have defied these stereotypes and have achieve successes in the society to inspire learners*		
	c. *Do community walk to expose learners to the contribution of TVET to society.*		
	d. *Take learners on an educational trip to industry to see at first-hand how people of diverse backgrounds and abilities including people with SEN are playing divers roles in real life and industry* (NTS 1a, 2f, 3a, 3e, 3g, and 3j).		
	1.11 In mixed gender grouping, ask teachers to list (where possible) some 21st century skills. *E.g. Communication skills, collaboration, observation and enquiry skills, digital literacy, creativity, innovative skills, life-long learning skills*	1.11 In mixed gender groupings (where possible) list some 21st century skills. *E.g. Communication skills, collaboration, observation and enquiry skills, digital literacy, creativity, etc.,*	
	1.12 Ask teachers to identify ways of incorporating ICT in their lesson. (NTS 1a, 3j).	1.12 Identify ways of incorporating ICT in your lesson. (NTS 1a, 3j).	

	E.g.
	    a) Surfing Open Educational Resources (OERs) and other internet sources for information
	    b) Teach using PowerPoint
	    c) Employ computer software such as AutoCAD, Photoshop, Coral Draw, Paint, in teaching and learning, etc.
	    d) Interact with learners via the Internet
	    e) create, use and encourage learners to use e-portfolios, etc.,
	
	1.13 Ask teachers to discuss possible activities they would adopt to develop 21st century skills such as communication skills, collaboration, observation and enquiry skills, digital literacy, creativity, personal development, in their learners. (NTS 3e, 3h and 3j).
	E.g.
	a) Group Discussion
	b) Project
	c) Research
	d) Role Play
	e) Hands-On Activities
	f) Extended Learning
	g) Powerpoint, etc.
		E.g.
		    Surfing Open Educational Resources (OERs) and other internet sources for information
		
		1.13 Discuss possible activities you would adopt to develop the 21st century skills such communication skills, collaboration, observation and enquiry skills, digital literacy, creativity, personal development in your learners. (NTS 3e, 3h and 3j).
		
		E.g.
		    Group discussion	

2	Planning for teaching, learning and assessment activities for the lesson/s making links to the TVET curriculum	2.1 Ask teachers to discuss samples of their lesson plans in their various TVET domains based on the 2010 SHS Syllabus and link them to the concepts of LOs and LIs*	2.1 Discuss samples of their lesson plans in their various TVET domains based on the 2010 SHS Syllabus and link them to the concepts of LOs and LIs*	20 mins
		Sample Lesson Topic in the TVET: Introduction to Agriculture, Home Economics, Technical Skills, Visual Art. **Agricultural Science** *Topic: Introduction to Agriculture Sub-topic: Importance of Agriculture (to the national economy).* **Home Economics** *Topic: Introduction to Nutrition* *Sub-topic: Importance of Nutrition.* **Technical Skills** *Topic: Introduction to Technical Drawing. Sub-topic: Importance of Technical Drawing.* **Visual Art** *Topic: Introduction to Picture Making Sub-topic: Importance of Picture Making.*	*Sample Lesson Topic in the TVET: Introduction to Agriculture, Home Economics, Technical Skills, Visual Art.* **Agricultural Science** *Topic: Introduction to Agriculture Sub-topic: Importance of Agriculture (to the national economy).* **Home Economics** *Topic: Introduction to Nutrition Sub-topic: Importance of Nutrition.* **Technical Skills** *Topic: Introduction to Technical Drawing. Sub-topic: Importance of Technical Drawing.* **Visual Art** *Topic: Introduction to Picture Making Sub-topic: Importance of Picture Making.*	

		a) Objectives	*a) Objectives*	
		By the end of the lesson, learners will be able to:	*By the end of the lesson, learners will be able to:*	
		i. *List the components of Agriculture, Nutrition, Technical Drawing and Picture making.*	i. *List the components of Agriculture, Nutrition, Technical Drawing and Picture making.*	
		ii. *Discuss the components of Agriculture, Nutrition, Technical Drawing and Picture making.*	ii. *Discuss the components of Agriculture, Nutrition, Technical Drawing and Picture making.*	
		iii. *List and discuss five products of Agriculture, Nutrition, Technical Drawing and Picture making.*	iii. *List and discuss products of Agriculture, Nutrition, Technical Drawing and Picture making.*	
		iv. *Discuss the importance of Agriculture, Nutrition, Technical Drawing and Picture making to the economy of Ghana.*	iv. *Discuss the importance of Agriculture, Nutrition, Technical Drawing and Picture making to the economy of Ghana.*	
		b) Core activities	*b) Core activities*	
		i. *Guide learners in groups to list the components of Agriculture, Nutrition, Technical Drawing and Picture making*	i. *Guide learners in groups to list the components of Agriculture, Nutrition, Technical Drawing and Picture making*	

	ii. Guide learners to surf OERs and other sources on the Internet to find more information to discuss the components of Agriculture, Nutrition, Technical Drawing and Picture making. iii. Guide learners to list and discuss five products of Agriculture, Nutrition, Technical Drawing and Picture making. iv. Put learners in mixed ability/gender groups (where possible) discuss the importance of Agriculture, Nutrition, Technical Drawing and Picture making to the economy of Ghana. **c) Evaluation** *Evaluate the lesson by using question and answer method.* **Teachers would be guided to tease out the learning outcomes and the learning indicators from the sample lesson plans outline.* 2.1 Ask teachers to tease out LOs and LIs from the sample lesson.	ii. Guide learners to surf OERs and other sources on the Internet to find more information to discuss the components of Agriculture, Nutrition, Technical Drawing and Picture making. iii. Guide learners to list and discuss five products of Agriculture, Nutrition, Technical Drawing and Picture making. iv. Put learners in mixed ability/gender groups (where possible) discuss the importance of Agriculture, Nutrition, Technical Drawing and Picture making to the economy of Ghana. **c) Evaluation** *Evaluate the lesson by using question and answer method.* **Tease out the learning outcomes and the learning indicators from the sample lesson plans outline.* 2.1 Tease out LOs and LIs from the sample lesson.	

	LO: Demonstrate understanding of the importance of agriculture, nutrition, technical drawing and picture making (to the national economy).	*LO: Demonstrate understanding of the importance of agriculture, nutrition, technical drawing and picture making (to the national economy).*
	LI.1 List the components of Agriculture, Nutrition, Technical Drawing and Picture making, etc.	*LI.1 List the components of Agriculture, Nutrition, Technical Drawing and Picture making.*
	LI.2 State the uses of Agriculture, Nutrition, Technical Drawing and Picture making.	*LI.2 State the importance of Agriculture, Nutrition, Technical Drawing and Picture making.*
	LI.3 Identify some products of Agriculture, Nutrition, Technical Drawing and Picture making (NTS 3a).	*LI.3 Identify some products of Agriculture, Nutrition, Technical Drawing and Picture making (NTS 3a).*

3	Teaching, learning and assessment
	
	• Reading and discussion of the teaching and learning activities noting, addressing, and explaining areas where teachers may require clarification
	▶ Noting opportunities for making *explicit* links to the Secondary School Curriculum
	▶ Noting opportunities for integrating: GESI responsiveness and ICT and 21st C skills
		3.1 Ask teachers to identify gaps in their sample lesson plans and discuss possible ways of addressing same (NTS 1a, 1e and 2c).
		E.g.
		Possible gaps:
		a) inadequate prescribed textbooks,
		b) inadequate model farms, workshops, kitchens and studios, etc.
		c) inadequate tools and materials
		Possible Solution:
		a) use of a library (e-library and physical), Open Educational Resources (OERs) and other Internet facilities
		b) use work-based learning method of teaching, etc.
		c) adopt local tools and materials in the immediate environment.
		
		3.2 Ask teachers to suggest alternative ways of delivering the sample lessons (NTS 3f, 3j).
		E.g. use of:
		    a) Flipped Classroom,
		    b) Extended Learning
		    c) Demonstration
		    d) Simulation
			3.1 Identify gaps in your sample lesson plans and discuss possible ways of addressing same (NTS 1a, 1e and 2c).
			E.g.
			Possible gap:
			Inadequate prescribed textbooks, etc.
			
			Possible Solution:
			Use of a library (e-library and physical), Open Educational Resources (OERs) and other Internet facilities
			
			3.2 Suggest alternative ways of delivering the sample lessons (NTS 3f, 3j).
			
			E.g. use of:
			    Flipped classroom,
				20 mins

	e) field trips *f) community walk* *g) work-based learning, etc.*		
	3.3 Ask teachers to review their sample lesson plans to identify activities that promote GESI responsiveness (NTS 3f, 3l and 3m). *E.g.* a) *Classroom Arrangement That Facilitates Interaction* b) *Mixed Ability Or Gender Groupings That Facilitate Collaboration* c) *Non-Stereotype Role Play* d) *Use Of Positive Feedback To Learners, Especially, The Disadvantaged* e) *Use Of A Local Resource Person Who Has Defied Stereotyping/ Stigma To Succeed in TVET.*	3.3 Review their sample lesson plans to identify activities that promote GESI responsiveness (NTS 3f, 3l and 3m). *E.g.* *Classroom arrangement that facilitates interaction*	
	3.4 Ask teachers to discuss how the session is linked to the use of formative assessment tools and practices (NTS 3k, 3l, 3m and 3n). *E.g.* a) *Assessment for learning* b) *Assessment as Learning* c) *Project work* d) *Role play*	3.4 Discuss how the unit is linked to the use of formative assessment tools and practices (NTS 3k, 3l, 3m and 3n). *E.g.* *Assessment for learning*	
	3.5 Ask teachers in their domain groups to brain-write other possible authentic assessment methods that could be used in the sample lesson and share same with the whole group (NTS 2e, 3k, 3l and 3o).	3.5 In your domain groups brain-write other possible authentic assessment methods that could be used in the sample lesson and share same with the whole group (NTS 2e, 3k, 3l and 3o).	

	E.g. *a) Self-assessment* *b) Peer-assessment* *c) Jury* *d) Appreciation* * and Appraisal* *e) Portfolio, etc.* 3.6 Guide teachers to list and discuss how the session makes use of ICT resources to support relevant activities in the NTS (NTS 3j). *E.g.* a) *Pre-recorded video* b) *Photographs,* c) *OERs/internet facilities* d) *Projectors, etc.* 3.7 Ask one teacher to model the sample lesson. (NTS 1f, 1c and 3a). **(EXTENSION ACTIVITY)**	*E.g.* *Self-assessment* 3.6 List and discuss how the session makes use of ICT resources to support relevant activities in the NTS (NTS 3j). *E.g.* *Pre-recorded video* 3.7 Ask one teacher to model the sample lesson. (NTS 1f, 1c and 3a). **(EXTENSION ACTIVITY)**	
Evaluation and review of session: • **Identifying and addressing any outstanding issues relating to the lesson/s for clarification** • **Noting that teachers need to identify critical friends to observe lessons and report at next session**	4.1 Ask teachers to reflect and brain-write what they have learnt in the session (NTS 1a, 1b and 1f). 4.2 Ask them to share what they have learnt with the larger group (NTS 1e). 4.3 Remind teachers to identify a critical friend to observe them in teaching their lessons as they relate to PLC session 5 and provide feedback at the next PLC session (NTS 1a, 1e and 3l). 4.4 Remind teachers to read Session 6 from the PLC Handbook in preparation for the next session (NTS 3b).	4.1 Reflect and brain-write what you have learnt in the session (NTS 1a, 1b and 1f). 4.2 Share with the larger group (NTS 1e). 4.3 Identify a critical friend to observe you in teaching your lessons in relation to PLC session 5 and provide feedback at the next PLC session (NTS 1a,1e and 3l) 4.4 Read Session 6 from the PLC Handbook in preparation for the next session (NTS 3b).	10 mins

TVET PLC Session 6: Community of Practice

TVET Domains:
1. Agriculture
2. Home Economics
3. Technical Skills
4. Visual Art

	Guidance notes on Leading the session. What the PLC Coordinator will have to say during each stage of the session	Guidance Notes on Teacher Activity during the PLC Session. What teachers will do during each stage of the session.	Time in session
1. Review of previous session and introduction of new session	1.1 Start the session by asking teachers to share one thing they did differently in the classroom and elsewhere based on the session on *the National Teachers' Standards*, which they think impacted learning positively. 1.2 Ask teachers to discuss and summarise in a single sentence why they think what a colleague did by way of application of lessons learned in the session on *professional development*, supported learning.	1.1 Share one thing you did differently in the classroom and elsewhere based on the session on *the National Teachers' Standards*, which you think impacted learning positively. 1.2 Discuss and summarise in a single sentence why you think what a colleague did by way of application of lessons learned in the session on *professional development*, supported learning.	30 mins

NB The guidance for PLC Coordinator should identify, address, and provide explanations for any areas where teachers might require clarification on an aspect of the lesson. **NB PLC Coordinator should ask teachers to plan for their teaching as they go through the PLC session**	1.3 Ask a teacher to read NTS 1d, 1e, 1f and 1g. (Refer teachers to Appendix B) and tease out the learning outcomes (LOs) and learning indicators (LIs) of the session with colleagues (NTS 1d, 1e, and 1f) and compare these with the LOs and LIs listed below. LO 1: Demonstrate knowledge and understanding of the legal and ethical codes of conduct for teachers and how they guide teacher behaviour. LI 1.1 State the code of ethics for teachers. LI 1.2 Explain how the code of ethics guides teachers' practice, professional conduct and relationship with stakeholders. LI 1.3 State the role of the head teacher in enforcing the code of ethics. LI 1.4 Prepare and deliver a sample lesson reflecting teacher professional ethics, good conduct, and appropriate relationship with all learners within the context of GESI (NTS 1d, 2a).	1.3 Read NTS 1d, 1e, 1f and 1g on the Community of Practice and tease out the learning outcomes (LOs) and learning indicators (LIs) of the session for a discussion with colleagues (NTS 1 d, 1e, 1f and 1g) and compare these with the LOs and LIs listed below. LO 1: Demonstrate knowledge and understanding of the legal and ethical codes of conduct for teachers and how they guide teacher behaviour. LI 1.1 State the code of ethics for teachers. LI 1.2 Explain how the code of ethics guides teachers' practice, professional conduct and relationship with stakeholders. LI 1.3 State the role of the head teacher in enforcing the code of ethics. LI 1.4 Prepare and deliver a sample lesson reflecting teacher professional ethics, good conduct, and appropriate relationship with all learners within the context of GESI (NTS 1d, 2a).	

| | | LO 2: Demonstrate knowledge and skill of engaging positively with all stakeholders (colleagues, learners, parents, school management committee (SMC), parent association and wider public) as an agent of change in a school's community of practice.

LI 2.1 Identify at least three stakeholders within the school's community of practice.

LI 2.2 Explain the role of stake holders in promoting a strong community of practice.

LI 2.3 Explain the role of the teacher as an agent of change (NTS 1e, 1f and 1g).

LO 3: Exhibit positive teacher identity by acting as a good role model for learners.

LI 3.1 Identify at least three characteristics of a good teacher.

LI 3.2 Explain how the attributes of a good teacher promote a strong community of practice (NTS 1f, 1g).

1.4 Ask teachers to identify other areas of community of practice that will enhance their teaching. (NTS 3m, 3n and 3) | LO 2: Demonstrate knowledge and skill of engaging positively with all stakeholders (colleagues, learners, parents, school management committee (SMC), parent association and wider public) as an agent of change in a school's community of practice.

LI 2.1 Identify at least three stakeholders within the school's community of practice.

LI 2.2 Explain the role of stake holders in promoting a strong community of practice.

LI 2.3 Explain the role of the teacher as an agent of change (NTS 1e, 1f and 1g).

LO 3: Exhibit positive teacher identity by acting as a good role model for learners.

LI 3.1 Identify at least three characteristics of a good teacher.

LI3.2 Explain how the attributes of a good teacher promote a strong community of practice (NTS 1f, 1g).

1.4 Identify other areas of community of practice that will enhance their teaching.
(NTS 3m, 3n and 3) | |

	E.g. *Professional TVET Associations such as:* a) *Ghana Art Teachers Association (GATA)* b) *Ghana Home Economics Association (GHEA)* c) *Agriculture Educators and Trainers Association of Ghana (EATAG)* d) *Ghana National Association of Teachers (GNAT)* e) *National Association of Graduate Teachers (NAGRAT)* f) *Coalition of Concerned Teachers Ghana (CCT-GH), etc. (o).*	*E.g.* *Professional TVET Associations such as:* *Ghana Art Teachers Association (GATA)*	

Give regard for misconceptions and stereotypes, GESI, ICT, 21ˢᵗ century skills, etc.	1.5 Ask teachers to identify possible misconceptions and stereotypes related to their various TVET lessons for the week (NTS 1a, 2e, 2f and 3m).
	E.g.
	Lesson topic for the week:
	  Tools and materials
	  Misconceptions
	  a) *Females cannot operate tractors and other farm equipment*
	  b) *Females who operate heavy machinery cannot give birth*
	  c) *SEN learners cannot operate machines, etc.*
		1.5 Identify possible misconceptions and stereotypes related to their various TVET lessons for the week (NTS 1a, 2e, 2f and 3m).
		E.g.
		Lesson topic for the week:
		  Tools and materials
		  Misconceptions
		  Females cannot operate tractors and other farm equipment
			10 mins

	1.6 Guide teachers to discuss possible ways of mitigating these misconceptions and stereotypes in a TVET classroom using the concept of community of practice (NTS 1a, 2c, 2e, 2f, 3e and 3m). *E.g.* a) *Invite a female machine operator or a machine operator with SEN as role models and resource persons to interact with learners to dispel the misconception.* b) *Use pre-recorded videos of persons who have defied these stereotypes and operating various machines successfully in the society* c. *Take learners on an educational trip to a TVET enterprise to see at first-hand how females and persons with disability have overcome such stereotypes in real life situations, etc.* 1.7 Ask teachers in mixed gender groups (where possible) to list some 21st century skills (NTS 2c, 3e, 3g, 3j and 3k).	1.6 Discuss possible ways of mitigating these misconceptions and stereotypes in a TVET classroom using the concept of community of practice (NTS 1a, 2c, 2e, 2f, 3e and 3m). *E.g.* *Invite a female machine operator or a machine operator with SEN as role models and resource persons to interact with learners to dispel the misconception.* 1.7 In mixed gender groups (if feasible) list some 21st century skills (NTS 2c, 3e, 3g, 3j and 3k).	

	E.g. *a) Communication skills* *b) Collaboration c)* *Observation and enquiry* *skills* *d) Digital literacy* *e) Creativity,* etc.	*E.g.* *a) Communication skills, etc.*	
	1.8. Ask teachers to identify ways of incorporating ICT in their lesson (NTS 3j). *E.g.* a) *Surf open educational resources (OERs) and other sources from the Internet for tools and how they are operated* b) *Simulate using smartboard and other ICT tools* c) *Teacher monitors learners in the workshop using CCTV cameras, etc.*	1.8. Identify ways of incorporating ICT in their lesson (NTS 3j). *E.g.* *Surf open educational resources (OERs) and other sources from the Internet for tools and how they are operated, etc.*	
	1.9 Ask teachers to discuss possible activities they would adopt to develop the 21st century skills in their learners (NTS 3i, 3l). *E.g.* a) *Hands-on activities* b) *Group discussion* c) *Role play* d) *Fieldtrip* e) *Research/project, etc.*	1.9 Discuss possible activities you would adopt to develop the 21st century skills in your learners (NTS 3i, 3l). *E.g.* *Hands-on activities*	

2. Planning for teaching, learning and assessment activities for the lesson/s making links to the TVET curriculum	2.1 Ask teachers to discuss samples of their lesson plans in their various TVET domains based on the 2010 SHS Syllabus and link them to the concepts of LOs and Lis*

Sample Lesson Topic in the TVET: The Production Process in Agriculture, Home Economics, Technical Skills and Visual Art.
Agricultural Science
Sub-topic: Tools and Materials in Agriculture.

Home Economics
Sub-topic: Tools and Materials in Home Economics.

Technical Skills
Sub-topic: Tools and Materials for Technical Drawing.

Visual Art
Sub-topic: **Tools and Materials in Picture Making** *(NTS 1a, 1e and 3a).* | 2.1 Discuss samples of your lesson plans in your various TVET domains based on the 2010 SHS Syllabus and link them to the concepts of LOs and LIs*

Sample Lesson Topics in the TVET: The Production Process in Agriculture, Home Economics, Technical Skills and Visual Art.
Agricultural Science
Sub-topic: Tools and Materials in Agriculture.

Home Economics
Sub-topic: Tools and Materials in Home Economics.

Technical Skills
Sub-topic: Tools and Materials Technical Drawing.

Visual Art
Sub-topic: **Tools and Materials in Picture Making** *(NTS 1a, 1e and 3a).* | 20 min |

		a) *Lesson Objectives:* By the end of the lesson learners will be able to; i. list at least five tools and five materials for Agriculture, Home Economics, Technical Skills and Visual Art ii. demonstrate the proper use of simple tools in Agriculture, Home Economics, Technical Skills and Visual Art iii. describe how basic tools and materials in Agriculture, Home Economics, Technical Skills and Visual Art can be maintained and preserved iv. formulate simple safety rules in the use of tools and materials in Agriculture, Home Economics, Technical Skills and Visual Art, etc.	a) *Lesson Objectives:* By the end of the lesson learners will be able to; i. List some tools and materials for Agriculture, Home Economics, Technical Skills and Visual Art ii. demonstrate the proper use of simple tools in Agriculture, Home Economics, Technical Skills and Visual Art iii. describe how basic tools and materials in Agriculture, Home Economics, Technical Skills and Visual Art can be maintained and preserved iv. formulate simple safety rules in the use of tools and materials in Agriculture, Home Economics, Technical and Visual Art, etc.	

	b) Core Activities:	b) Core Activities:	
	i. Guide learners to list basic tools and materials in Agriculture, Home Economics, Technical Skills and Visual Art	i. Guide learners to list basic tools and materials in Agriculture, Home Economics, Technical and Visual Art	
	ii. Demonstrate or simulate the use of basic tools in Agriculture, Home Economics, Technical Skills and Visual Art using hands-on activity, smart board, YouTube videos or pre-recorded videos, etc.	ii. Demonstrate or simulate the use of basic tools in Agriculture, Home Economics, Technical Skills and Visual Art using hands-on activity, smart board, YouTube videos or pre- recorded videos, etc.	
	iii. Assist learners to try their hands at operating basic tools using basic instructional guides like flowchart, spidergram, etc.	iii. Assist learners to try their hands at operating some basic tools using basic instructional guides like flowchart, spidergram, etc.	
	iv. Guide learners to formulate simple safety rules for the use, maintenance and preservation of tools and materials.	iv. Guide learners to formulate simple safety rules for the use, maintenance and preservation of tools and materials.	
	c) Evaluation: Use question and answer, concept mapping, etc., to review the lesson. *Teachers would be guided to tease out the learning outcomes and the learning indicators from the sample lesson plans outline.	c) Evaluation: Use question and answer, concept mapping, etc., to review the lesson. *Tease out the learning outcomes and the learning indicators from the sample lesson plans outline.	

	2.2 Ask teachers to tease out the LOs and LIs from their sample lessons and compare them with the objectives. *LO: Demonstrate the appropriate uses of tools and materials in Agriculture, Home Economics Technical Skills and Visual Art.* *LI 1 List the tools and materials in Visual Art, Technical Skills, Home Economics, and Agriculture* *LI 2 State the uses of tools and materials in Visual Art, Technical Skills, Home Economics, and Agriculture* *LI 3 Discuss ways of caring and maintaining tools and materials in Agriculture, Home Economics Technical Skills and Visual Art (NTS 3g, 3h and 3i).*	2.2 Tease out the LOs and LIs from their sample lessons and compare them with the objectives. *LO: Demonstrate the appropriate use of tools and materials in Agriculture, Home Economics Technical Skills and Visual Art.* *LI 1 List the tools and materials in Visual Art, Technical Skills, Home Economics, and Agriculture* *LI 2 State the uses of tools and materials in Visual Art, Technical Skills, Home Economics, and Agriculture*	

3.	Teaching, learning and assessment	3.1 Ask teachers to identify gaps in their lesson plans.	3.1 Identify gaps in your lesson plans.	20 mins
	▶ Reading and discussion of the teaching and learning activities noting, addressing, and explaining areas where teachers may require clarification	*E.g.* *Possible gaps:* *a) Inadequate teaching and learning resources.* *b) Non-availability of workshops, model farms, kitchen, etc.* *c) Inadequate time on the school time table for practical work* *d) low morale among TVET student*	*E.g.* *Possible gaps:* *Inadequate teaching and learning resources.*	
	▶ Noting opportunities for making *explicit* links to the Secondary School Curriculum ▶ Noting opportunities for integrating: GESI responsiveness and ICT and 21st C skills	3.2 Ask teachers to suggest ways they can apply the concept of community of practice to resolve the possible gaps in their lesson plans (NTS 3a, 3b, 3c and 3d). *Possible Solutions:* *a) field trip to workshops in town to observe the real uses of tools and materials.* *b) use local experts in your community of practice as resource person etc.* *c) use team teaching methods*	3.2 Suggest ways you can apply the concept of community of practice to resolve the possible gaps in their lesson plans (NTS 3a, 3b, 3c and 3d). *Possible Solutions:* *Field trip to workshops in town to observe the real uses of tools and Materials, etc.*	
		3.3 Ask teachers to suggest alternative ways of delivering the sample lessons (NTS 3e, 3g). *E.g., Use of:* *a) Pre-recorded video or YouTube videos* *b) Extended learning* *c) Demonstration or simulation* *d) Field trips/community*	3.3 Suggest alternative ways of delivering the sample lessons (NTS 3e, 3g). *E.g., Use of:* *Video with discussion,* *.*	

	walk e) *Work-based learning etc.* 3.4 Ask teachers to review their sample lesson plans to identify activities that promote GESI responsiveness, (NTS 3f, 3m). *E.g.* a) *Classroom arrangement to facilitate effective learners' interaction* b) *Mixed ability/gender groupings to facilitate collaboration among learners* c) *Non-stereotype role-play to encourage all learners including SEN learners to participate in the learning process.* d) *Using positive feedback to learners especially female and SEN learners to motivate them to put up their best.* e) *Use of a local resource person who has defied stereotyping/ stigma to succeed in TVET.* 3.5 Ask teachers to discuss how the session is linked to the use of formative assessment tools and practices (NTS 3k, 3p). *E.g.* a) *Assessment for learning* b) *Assessment as learning* c) *Project work* d) *Portfolio building* 3.6 In groups, ask teachers to suggest other authentic assessment methods that could be used in the sample lesson (NTS 3k, 3p).	3.4 Review your sample lesson plans to identify activities that promote GESI responsiveness (NTS 3f, 3m). *E.g.* *Classroom arrangement to facilitate effective learners' interaction* 3.5 Discuss how the session is linked to the use of formative assessment tools and practices (NTS 3k, 3p). *E.g.* *Assessment for learning* 3.6 In groups, suggest other authentic assessment methods that could be used in the sample lesson (NTS 3k, 3p).	

	E.g. a) *Self-assessment* b) *Peer-assessment* c) *Jury* d) *Appreciation and Appraisal* e) *Portfolio, etc.* 3.7 Guide teachers to discuss how the lesson makes use of ICT resources to support relevant activities in the sample lesson (NTS 3g, 3j). *E.g.* a) *Pre-recorded videos* b) *Photographs,* c) *OERs/internet facilities* d) *Projectors* e) *Smart boards* f) *Internet learning, etc.* 3.8 Ask one teacher to model a teaching activity in the teaching activity in the sample lesson in any of the TVET domains taking due cognizance of the concept of community of practice (NTS 1d) **(EXTENSION ACTIVITY)**	*E.g.* *Self-assessment* 3.7 Discuss how the lesson makes use of ICT resources to support relevant activities in the sample lesson (NTS 3g, 3j). *E.g.* *Pre-recorded videos* 3.8 Model a teaching activity sample lesson in any of the TVET domains taking due cognizance of the concept of community of practice (NTS 1d). **(EXTENSION ACTIVITY)**	

4. Evaluation and review of session: ▶ **Identifying and addressing any outstanding issues relating to the lesson/s for clarification** ▶ **Noting that teachers need to identify critical friends to observe lessons and report at next session**	4.1 Ask teachers to reflect and brain-write what they have learnt in the session (NTS 1a, 1b and 1f). 4.2 Ask them to share what they have learnt with the larger group (NTS 1e). 4.3 Remind teachers to identify a critical friend to observe them in teaching their lessons in relation to PLC Session 6 and provide feedback at the next PLC session (NTS 1a, 1e and 3l). 4.4 Remind teachers to read Session 7 from the PLC Handbook in preparation for the next session (NTS 3b).	4.1 Reflect and brain-write what you have learnt in the session (NTS 1a, 1b and 1f). 4.2 Share with the larger group (NTS 1e). 4.3 Identify a critical friend to observe you in teaching your lessons in relation to PLC Session 6 and provide feedback at the next PLC session (NTS 1a, 1e and 3l). 4.4 Read Session 7 from the PLC Handbook in preparation for the next session (NTS 3b).	10 mins

TVET PLC Session 7: Knowledge of Educational Frameworks and Curriculum.

TVET Domains:
1. Agriculture
2. Home Economics
3. Technical Skills
4. Visual Art

	Guidance notes on Leading the session. *What the PLC Coordinator will have to say during each stage of the session*	Guidance Notes on Teacher Activity during the PLC Session. *What teachers will do during each stage of the session.*	Time in session
1. **Review of previous session and introduction to new session**	1.1 Start the session by asking teachers to share one thing they did differently in the classroom and elsewhere based on the session on *community of practices*, which they think impacted learning positively. 1.2 Ask teachers to discuss and summarise in a single sentence why they think what a colleague did by way of application of lessons learned in the session on *professional development*, supported learning.	1.1 Share one thing you did differently in the classroom and elsewhere based on the session on *community of practice*, which you think impacted learning positively. 1.2 Discuss and summarise in a single sentence why you think what a colleague did by way of application of lessons learned in the session on *professional development*, supported learning.	**30 mins**

| NB The guidance for PLC Coordinator should identify, address, and provide explanations for any areas where teachers might require clarification on an aspect of the lesson.
NB PLC Coordinator should ask teachers to plan for their teaching as they go through the PLC session | 1.3 Either use the story of the 'Friendship of the Elephant and the mosquito' as an ice breaker or invite a teacher to give an ice breaker related to the topic

The friendship of the Elephant and the Mosquito

 Long ago, the elephant and the mosquito were very good friends. They went everywhere together.
One hot afternoon, they decided to go fishing to while away the time. After spending the whole afternoon without a catch, the elephant eventually had one.
With great joy and excitement, he shouted out to his friend the mosquito, '*Ko Mosquito, I have caught a big fish'*.
The mosquito who was then busy chasing some humans for a bite, replied to his friend the elephant, *'really?' 'Ko Elephant, is your catch as big as my leg'?*
The elephant was dumbfounded and angered at the mosquito's sense of size. 'How could I call a thing as small as your leg, which I can't even see, as big?' 'What a disgusting description', queried the Elephant. A hot argument then ensued between them which eventually broke their long-time friendship. | 1.3 Use the story of the 'Friendship of the Elephant and the mosquito' as an ice breaker or give an ice breaker related to the topic

 The friendship of the Elephant and the Mosquito

Long ago, the elephant and the mosquito were very good friends. They went everywhere together.
One hot afternoon, they decided to go fishing to while away the time. After spending the whole afternoon without a catch, the elephant eventually had one.
With great joy and excitement, he shouted out to his friend the mosquito, '*Ko Mosquito, I have caught a big fish'*.
The mosquito who was then busy chasing some humans for a bite, replied to his friend the elephant, '*really?' 'Ko Elephant, is your catch as big as my leg'?* The elephant was dumbfounded and angered at the mosquito's sense of size. 'How could I call a thing as small as your leg, which I can't even see, as big?' 'What a disgusting description', queried the Elephant. A hot argument then ensued between them which eventually broke their long-time friendship, | 25 mins |

	1.4 Ask teachers to: a) *Identify the concept of 'big' and small' as was seen by the mosquito and the elephant* b) *Speak to the dangers of limiting one's judgement to only one's horizon?* c) *Suggest how the two friends could have learnt from each other?* d) *Relate this story to the ideas behind the PLC concept* 1.5 Ask a teacher to read NTS 2a, 2b, 2c and 2d on the *Knowledge of Educational Frameworks and Curriculum* in the NTS and tease out the learning outcomes (LOs) and learning indicators (LIs) of the session and compare these with the LOs and LIs listed below. LO 1: Demonstrate knowledge and understanding of the school curriculum and its learning outcomes. LI 1.1 State the pedagogies prescribed for the delivery of the secondary school curriculum. LI 1.2 Discuss the implication(s) of the prescribed pedagogies in LI 2.2 on teaching and learning.	1.4 a) *Identify the concept of 'big' and small' as was seen by the mosquito and the elephant* b) *Speak to the dangers of limiting one's judgement to only one's horizon?* c) *Suggest how the two friends could have learnt from each other?* d) *Relate this story to the ideas behind the PLC concept* 1.5 Read NTS 2a, 2b, 2c and 2d on the Knowledge of Educational Frameworks and Curriculum and tease out the learning outcomes (LOs) and learning indicators (LIs) of the session and compare these with the LOs and LIs listed below. LO 1: Demonstrate knowledge and understanding of the secondary school curriculum and its learning outcomes. LI 1.1 State the pedagogies prescribed for the delivery of the secondary school curriculum. LI 1.2 Discuss the implication(s) of the prescribed pedagogies in LI 2.2 on teaching and learning.	

	LI 1.3 Give examples of learning outcomes in any subject area.

LO 2: Exhibit content knowledge, pedagogical knowledge and pedagogical content knowledge for the grade taught.

LI 2.1Explain the concept of:
  a) Content knowledge (CK)
  b) Pedagogical knowledge (PK)
  c) Pedagogical content knowledge (PCK)

LI 2.2 Explain the relationship between the three concepts as in a, b, and c.
LI 2.3 Describe how pedagogical content knowledge will help in lesson preparation and delivery (NTS 2b, 2c)

1.6 Ask teachers to identify and discuss how TVET knowledge and skills (as it relates to the various domains) are articulated within the Educational Frameworks and Curriculum (NTS 1a, 2b and 2d). | LI 1.3 Give examples of learning outcomes in any subject area.

LO 2: Exhibit content knowledge, pedagogical knowledge and pedagogical content knowledge for the school and grade taught

LI 2.1Explain the concept of:
  a) Content knowledge (CK)
  b) Pedagogical knowledge (PK)
  c) Pedagogical content knowledge (PCK)

LI 2.2 Explain the relationship between the three concepts as in a, b, and c.
LI 2.3 Describe how pedagogical content knowledge will help in lesson preparation and delivery (NTS 2b, 2c).

1.6 Identify and discuss how TVET knowledge and skills (as it relates to the various domains) are articulated within the Educational Frameworks and Curriculum (NTS 1a, 2b and 2d). | |

	E.g.
	a) *TVET domains concentrate on hands-on activities*
	b) *TVET curriculum promotes inter domain activities*
	c) *Assessment of TVET activities is based on competencies*
	d) *TVET curriculum promotes competency- based teaching, etc.*
	
	1.7 Ask teachers to explain the concept of:
	  a) Content knowledge (CK)
	  b) Pedagogical knowledge (PK)
	  c) Pedagogical content knowledge (PCK)
	E.g.
	a) *CK describes knowledge of subject matter*
	b) *PK describes how the content can be taught*
	c) *PCK describes subject specific pedagogical knowledge, etc.*
		E.g.
		  TVET domains concentrate on hands-on activities, etc.
		
		1.7 Ask teachers to explain the concept of:
		  a) Content knowledge (CK)
		  b) Pedagogical knowledge (PK)
		  c) Pedagogical content knowledge (PCK)
		
		E.g.
		  CK describes knowledge of subject matter, etc.	

	1.8 Ask teachers to describe how pedagogical content knowledge will help in lesson preparation and delivery (NTS 2b, 2c). *E.g.* a) *PCK helps the teacher to present same aspects of the content in different ways to support differentiation* b) *PCK allows the teacher to get learners to work on content before the lesson* c) *PCK helps teachers to put learners in ability groups*	1.8 Describe how pedagogical content knowledge will help in lesson preparation and delivery (NTS 2b, 2c). *E.g.* *PCK helps the teacher to present same aspects of the content in different ways to support differentiation*	

Give regard for misconceptions and stereotypes, GESI, ICT, 21st century skills, etc.	1.9 Ask teachers to identify possible misconceptions and stereotypes in their various TVET lesson topics for the week (NTS 2f, 3f and 3m).
	E.g.
	Lesson Topic:
	    Career Opportunities in:
	        a) Agriculture
	        b) Home Economics
	        c) Technical Skills
	        d) Visual art
		1.9 Identify possible misconceptions and stereotypes in the various TVET lesson topics for the week (NTS 2f, 3f and 3m).
		
		E.g.
		Lesson Topic:
		    Career Opportunities in:
		        a) Agriculture
		        b) Home Economics
		        c) Technical Skills
		        d) Visual art
			10 mins

	Possible misconceptions and stereotypes a) *Agriculture careers are not a profession for learned people* b) *Home Economics: career opportunities are reserved for females* c) *Technical Skills: Persons with disability cannot go into Technical Skills careers* d) *Visual Art: some careers in Visual Arts are the preserve of males, etc.* 1.10 Guide teachers to discuss possible ways to mitigate these misconceptions and stereotypes in TVET (NTS 1a, 2f, 3a, 3g, 2j and 3e). *E.g.* a) *Invite role models or resource persons that have overcome these stereotypes and have achieved successes in the TVET domains in the community* b) *Prepare and use pre- recorded videos of persons who have defied*	*Possible misconceptions and stereotypes* *Agriculture careers are not a profession for learned people, etc.* . 1.10 Discuss possible ways to mitigate these misconceptions and stereotypes in TVET (NTS 1a, 2f, 3a, 3g, 2j and 3e). *E.g.* *Invite role models/resource persons that have overcome these stereotypes and have achieved successes in the TVET domains in the community, etc.*	

	these stereotypes and have achieved successes in the society c) *Do a community walk to expose learners to the contribution of TVET to the society* d) *Organize field trip to institutions for learners to observe and interact with people in diversity of TVET professions, etc.* 1.11 In mixed gender groupings (where possible) ask teachers to list some 21st century skills and share with the whole group (NTS 2c 3a). *E.g.* a) *Communication skills* b) *Collaboration skills* c) *Observation and enquiry skills,* d) *Digital literacy,* e) *Creativity* f) *Personal development.* 1.12 Ask teachers to identify ways of incorporating ICT in their lesson (NTS 1a, 3j).	1.11 In mixed gender groupings (if feasible) list some 21st century skills and share with the whole group (NTS 2c 3a). *E.g.* *Communication skills, etc* 1.12 Identify ways of incorporating ICT in your lesson (NTS 1a, 3j).	

	E.g. *a) Surf Open Educational Resources (OERs) and other Internet sources for information on knowledge of educational frameworks and curriculum.* *b) Teach using PowerPoint presentations* *c) Employ computer software such AutoCAD, Photoshop, Coral Draw, Paint, etc.* *d) Teacher interacts and monitors learners' extended learning via electronic or social media platforms, e.g., Zoom, etc.* *e) Learners submit their assignments electronically through E-mails, telegram, WhatsApp, etc.)* 1.13 Ask teachers to discuss possible activities they would adopt to develop the 21st century skills in their learners such as communication skills, collaboration skills, observation and enquiry skills, digital literacy, creativity and personal development skills (NTS 3e, 3h and 3j).	*E.g.* *Surf Open Educational Resources (OERs) and other Internet sources for information on knowledge of educational frameworks and curriculum, etc.* 1.13 Discuss possible activities you would adopt to develop the 21st century skills in their learners such as communication skills, collaboration, observation and enquiry skills, digital literacy, creativity and personal development skills (NTS 3e, 3h and 3j).	

		E.g. a) *Learners to do group PowerPoint presentations to facilitate digital literacy, collaborative skills, etc.* b) *Project and research to encourage observation, enquiry skills, personal development skills, etc.* c) *Role-play to develop leadership skills* d) *Hands-on activities to facilitate creativity, etc.*	*E.g.* *Learners to do group PowerPoint presentations to facilitate digital literacy, collaborative skills, etc.*	
2	**Planning for teaching, learning and assessment activities for the lesson/s making links to the TVET curriculum**	2.1 Ask teachers to discuss samples of their lesson plans in their various TVET domains based on the 2010 SHS syllabus and link them to the concept of Knowledge of Educational Frameworks and Curriculum*. *Sample Lesson Topics in the TVET domain:* *Topic: Scope and importance of: Agriculture, Home Economics, Technical Skills and Visual Art.* *Sub-topic: Career opportunities in Agriculture, Home Economics, Technical Skills and Visual Art.*	2.1 Discuss samples of your lesson plans in your various TVET domains based on the 2010 SHS syllabus and link them to the concept of Knowledge of Educational Frameworks and Curriculum*. Sample Lesson Topics in the TVET domain: Topic: Scope and importance of: Agriculture, Home Economics, Technical Skills and Visual Art. Sub-topic: Career opportunities in Agriculture, Home Economics, Technical Skills and Visual Art.	20 mins

| | a) **Objectives for the lesson**: By the end of the lesson, the learner will be able to:
   i. Mention at least five career opportunities in Agriculture, Technical skills, Home Economics, and Visual Art
   ii. List the qualifications needed for entry into the career opportunities mentioned in i. above
   iii. State their career preferences.

 b) **Core Activities**
   i. Surf OERs and other sources on the Internet to discover career opportunities in Agriculture, Home Economics, Technical Skills and Visual Art
   ii. Discuss qualifications needed for assessing career opportunities in Agriculture, Home Economics, Technical Skills and Visual Art
   iii. Invite a career expert in TVET to interact with learners
   iv. Discuss the career preferences of learners in relation to their capabilities and desires.
 c) **Evaluation:**
 Use question and answer method to evaluate the lesson | a) **Objectives for the lesson**: By the end of the lesson, the learner will be able to:
   i. Mention at least five career opportunities in Agriculture, Technical skills, Home Economics, and Visual Art
   ii. List the qualifications needed for entering into the career opportunities mentioned in i. above

   iii. State their career preferences.

 b) **Core Activities**
   i. Surf OERs and other sources on the Internet to discover career opportunities in Agriculture, Home Economics, Technical Skills and Visual Art
   ii. Discuss qualifications needed for assessing career opportunities in Agriculture, Home Economics, Technical Skills and Visual Art
   iii. Invite a career expert in TVET to interact with learners
   iv. Discuss the career preferences of learners in relation to their capabilities and desires.
 c) **Evaluation:**
 Use question and answers to evaluate the lesson | |

		Teachers would be guided to tease out the learning outcomes and learning indicators from sample lesson plan 2.2 Ask teachers to tease out the LOs and the LIs from their sample lesson plans. *E.g.* *LO: Demonstrate Knowledge and understanding of the different career opportunities in Agriculture, Technical skills, Home Economics, and Visual Art.* *LI 1.1 Mention at least five career opportunities in Agriculture, Home Economics, Technical skills and Visual Art.* *LI 1.2 Discuss the requirements that are needed for the various career opportunities in Agriculture, Home Economics, Technical skills and Visual Art.* *LI 1.3 State the benefit of the various career opportunities to the individual and the nation at large, etc..*	*Teachers would be guided to tease out the learning outcomes and learning indicators from sample lesson plan* 2.2 Tease out the LOs and the LIs from your sample lesson plans. *E.g.* *LO: Demonstrate Knowledge and understanding of the different career opportunities in Agriculture, Technical skills, Home Economics, and Visual Art.* *LI 1.1 Mention at least five career opportunities in Agriculture, Home Economics, Technical skills and Visual Ar, etct.*	
3	**Teaching, learning and assessment** ▶ **Reading and discussion of the teaching and learning activities noting,**	3.1 Guide teachers to identify gaps in their lesson plans (if any) and use their knowledge of the secondary school curriculum to resolve them (NTS 1a, 1c). *E.g.* *Possible gaps:* a) Unsuitable teaching methods. b) Inadequate teaching and learning resources, etc.	3.1 Identify gaps in your lesson plans (if any) and use your knowledge of the secondary school curriculum to resolve them (NTS 1a, 1c). *E.g.* *Possible gaps:* Inadequate teaching and learning resources, etc. *Possible Solution:*	20 mins

addressing, and explaining areas where teachers may require clarification ▶ **Noting opportunities for making *explicit* links to the Secondary School Curriculum** ▶ **Noting opportunities for integrating: GESI responsiveness and ICT and 21st C skills, etc**	*Possible Solution:* 4 *Make efficient use of pedagogical content knowledge to select appropriate methods of teaching, e.g., Drama or role-play, video show to depict various career opportunities* 5 *Use field trips to relevant industries in town or beyond to observe the real application of the careers.* 6 *Use local experts in the community as resource persons,* 7 *Explore other domains of the educational framework and curriculum to adopt and adapt suitable alternatives to resolve the challenge of inadequate resources.*	*Use field trips to relevant industries in town or beyond to observe the real application of the careers.*	
	3.2 Ask teachers to suggest alternative ways of delivering the sample lessons (NTS 3f, 3j). *E.g., use of:* a) *Pre-recorded video to show variety of career opportunities* b) *Library or/and Internet research to read about career opportunities* b) *Field trips to see at first hand career opportunities* c) *Community walk to expose learners to career opportunities in their immediate community*	3.2 Suggest alternative ways of delivering the sample lessons (NTS 3f, 3j). *E.g., use of:* *Pre-recorded video to show variety of career opportunities, etc.*	

	d) Use of Career mentors to avail the learners' opportunity to interact at first hand and to ask pertinent questions to remove doubt, fear, uncertainty, stereotypes and misconceptions *e) Use of Career assessment tests to provide scientific bases for the learners preferred careers, etc.* 3.3 Ask teachers to review their sample lesson plans to identify activities that promote GESI responsiveness (NTS 2f, 3f, 3g and 3h). *E.g.* *a) Classroom arrangement to facilitate better learner to learner interaction as well as easy teacher assess to learners* *b) Mixed ability and/or gender groupings to ensure GESI compliance* *c) Non-stereotype role- plays to overcome limitations placed on learners due to misconceptions and stereotypes* *d) Using positive feedback to learners especially female and SEN learners to encourage them to do their best in all circumstances* *e) Use of local career mentors as resource persons who have defied stereotyping and*	3.3 Review your sample lesson plans to identify activities that promote GESI responsiveness (NTS 2f, 3f, 3g and 3h). *E.g.* *Classroom arrangement to facilitate better learner to learner interaction as well as easy teacher assess to learners*	

	stigma to succeed in TVET to instil the 'I can do' spirit among learners f) *Use of a variety of talk for learning techniques such as, think-pair-share, brainstorming, reverse- brainstorming, brain- writing, discussions, etc. to facilitate healthy communication among all learners irrespective of gender or ability.*		

	3.4 Ask teachers to discuss how the session is linked to the use of formative assessment tools and practices.
	
	a) *Learners to self and peer review or assess their work*
	b) *Seminar to solicit wider community views and appreciation of learners' concept of TVET career opportunities and their preferred choices*
	c) *Portfolio and reflective journals for self- assessment to develop intrinsic motivation for self - improvement, etc.*
	
	3.5 In groups, ask teachers to suggest authentic summative assessment methods that could be used in the sample lesson *(NTS 2e, 3k, 3l and 3o).*
	E.g.
	a) *Develop a check list indicating stages of the activity*
	b) *Identify skill(s) that must be acquired*
	c) *Determine scores for each stage depending on the complexity of the skill*
	d) *Completed artefact must be scored on the following criteria:*
	   i. *Evidence of Preliminary/idea development process*
		3.4 Discuss how the session is linked to the use of formative assessment tools and practices.
		
		Learners to self and peer review or assess their work
		
		3.5 In groups, suggest authentic summative assessment methods that could be used in the sample lesson *(NTS 2e, 3k, 3l and 3o).*
		
		E.g.
		   Develop a check list indicating stages of the activity
		   i. *Development process*
		   ii. *Appropriate use of tools/material*
		   iii. *Draft/craftsmanshi p (Composition- appropriate use of principles and elements of design, Colour and tone, etc. for 2-D works)*
		   iv. *Originality*	

		ii. *Appropriate use of tools/material* iii. *Draft/craftsmanship (Composition-appropriate use of principles and elements of design, Colour and tone, etc. for 2-D works)* iv. *Originality*		
		3.6 Ask one teacher to model a teaching activity in the sample lesson in any of the TVET domains (NTS 1c, 1f and 3a). **(EXTENSION ACTIVITY)**	3.6 Model a teaching a teaching activity in the sample lesson in any of the TVET domains (NTS 1c, 1f and 3a). **(EXTENSION ACTIVITY)**	
4	**Evaluation and review of session:** ▶ **Teachers need to identify critical friends to observe lessons and report at next session** ▶ **Identifying and addressing any outstanding issues relating to the lesson/s for clarification**	4.1 Ask teachers to brain-write what they have learnt in the session (*NTS 1a, 1b, 1e and 1f*). 4.2 Ask them to share what they have written with the larger group (*NTS 1e*). 4.3 Ask teachers to ask any further questions for clarification. 4.4 Remind teachers to identify a critical friend to observe them in teaching their lessons in relation to PLC Session 7 and provide feedback at the next PLC session (*NTS 1a, 1e and 3l*). 4.5 Remind teachers to read Session 8 from the PLC Handbook in preparation for the next session (*NTS 3b*).	4.1 Brain-write what they have learnt in the session (*NTS 1a, 1b, 1e and 1f*). 4.2 What they have written with the larger group (*NTS 1e*). 4.3 Ask questions on any issue that need further clarification. 4.4 Identify a critical friend to observe you in teaching your lessons in relation to PLC session 7 and provide feedback at the next PLC Session (*NTS 1a, 1e and 3l*). 4.5 Read Session 8 from the PLC Handbook in preparation for the next session (*NTS 3b*).	15 mins

TVET PLC Session 8: Knowledge of Learners.

NB. TVET Domains:
1. Agriculture
2. Home Economics
3. Technical Skills
4. Visual Art

	Guidance notes on Leading the session. *What the PLC Coordinator will have to say during each stage of the session*	Guidance Notes on Teacher Activity during the PLC Session. *What teachers will do during each stage of the session.*	Time in session
1. **Review of previous session and introduction to new session**	1.1 Start the session by asking teachers to share one thing they did differently in the classroom and elsewhere based on the session on *community of practices*, which they think impacted learning positively. 1.2 Ask teachers to discuss and summarise in a single sentence why they think what a colleague did by way of application of lessons learned in the session on *professional development*, supported learning.	1.1 Share one thing you did differently in the classroom and elsewhere based on the session on *community of practice*, which you think impacted learning positively. 1.2 Discuss and summarise in a single sentence why you think what a colleague did by way of application of lessons learned in the session on *professional development*, supported learning.	**30 mins**

			25 mins
NB The guidance for PLC Coordinator should identify, address, and provide explanations for any areas where teachers might require clarification on an aspect of the lesson. **NB PLC Coordinator should ask teachers to plan for their teaching as they go through the PLC session**	1.3 Ask a teacher to read NTS 2 (e and f) on the *Knowledge of Learners* of the NTS and tease out the learning outcomes (LOs) and learning indicators (LIs) of the session and compare them with the LOs and LIs listed below. (NTS 2d, 2f). LO 1: Demonstrate the understanding of how learners learn in diverse contexts and apply this in teaching. LI 1.1 Identify different contexts in which learners learn. LI 1.2 Identify and discuss the appropriate methods of teaching learners at different developmental stages. LO 2: Demonstrate knowledge and skills in harmonizing and directing learners varied cultural, linguistic, socio-economic and educational backgrounds in their planning and teaching. LI 2.1 Identify at least four possible cultural and linguistic backgrounds found in Ghanaian Senior	1.3 Read NTS 2 (e and f) on the *Knowledge of Learners* of the NTS teachers to Appendix E and tease out the learning outcomes (LOs) and learning indicators (LIs) of the session and compare them with the LOs and LIs listed below (NTS 2d, 2f). LO 1: Demonstrate the understanding of how learners learn in diverse contexts and apply this in teaching LI 1.1 Identify different contexts in which leaners learn. LI 1.2 Identify and discuss the appropriate methods of teaching learners at different developmental stages. . LO 2: Demonstrate knowledge and skills in harmonizing and directing learners varied cultural, linguistic, socio-economic and educational backgrounds in their planning and teaching. LI 2.1 Identify at least four possible cultural linguistic and backgrounds found in Ghanaian Senior High Schools,	

	High Schools. LI 2.2 Discus at least three learning approaches/styles that facilitates learning among learners from varied cultural, linguistic, socio-economic and educational backgrounds. LO 3: Demonstrate knowledge and understanding of GESI issues. LI 3.1 Mention at least five GESI related issues in learning. LI 3.2 Outline the need for incorporating GESI issues in classroom. 1.4 Ask teachers to discuss how they can help learners relate concepts from the varied cultural, linguistic, socio-economic and educational backgrounds to the learning of TVET (NTS 2f). *E.g.* *a) Incorporating traditional symbols into designs* *b) Identifying possible science behind some indigenous beliefs/taboos* *c) Incorporate some good indigenous practices into the formal sector, etc.*	LI 2.2 Discus at least three learning approaches/styles that facilitates learning among learners from varied cultural, linguistic, socio-economic and educational backgrounds. LO 3: Demonstrate knowledge and understanding of GESI issues. LI 3.1 Mention at least five GESI related issues in learning. LI 3.2 Outline the need for incorporating GESI issues in classroom. 1.4 Show you can help learners relate concepts from the varied cultural, linguistic, socio-economic and educational backgrounds to the learning of TVET (NTS 2f). *E.g.* *Incorporating traditional symbols into designs, etc.*	

	1.5 Ask teachers to identify different learning styles of learners that will enhance teaching in the TVET domains (NTS 2e, 2f, 3e and 3g). *E.g.* e) *Auditory learning* f) *Kinesthetic learning* g) *Tactile learning* h) *Visual learning, etc.*	1.5 Ask teachers to identify different learning styles of learners that will enhance teaching of their subjects (NTS 2e, 2f, 3e and 3g). *E.g.* *Tactile learning, etc.*	

	1.6 Ask teachers to identify other related areas on knowledge of learners that will enhance the delivery of the TVET curriculum (NTS 2e, 2f and 3m).
	  E.g.
	a) *Learner's cultural background*
	b) *Learner's educational background*
	c) *Learner's socio-economic background, etc.*
		1.6 Identify other related areas on knowledge of learners that will enhance the delivery of the TVET curriculum (NTS 2e, 2f and 3m).
		
		  E.g.
		 Learner's educational background	

	1.7 Identify at least four possible cultural and linguistic backgrounds found in Ghanaian Senior High Schools	1.7 Identify at least four possible cultural and linguistic backgrounds found in Ghanaian Senior High Schools that can influence the learning of TVET subject	

	that can influence the learning of TVET subject *E.g.* a) *Learners from different cultures are exposed to different artefacts such as those in urban areas using gas stoves for cooking while those in rural areas using wood for cooking* b) *Learners from wealthy home are more fluent in English language than those from poor homes* c) *Learners from farming communities are more likely to succeed in the study of agricultural science than those from urban areas*	*E.g.* *Learners from different cultures are exposed to different artefacts such as those in urban areas use gas stoves for cooking while those in rural areas use wood for cooking*	
Give regard for misconceptions and stereotypes, **GESI, ICT, 21st century skills, etc.**	1.8 Ask teachers to identify possible misconceptions and stereotypes in their various TVET domains (NTS 3m). *Possible misconceptions and stereotypes* a) *TVET is reserved for people with little intellectual endowment hence they can't set targets and attain them* b) *TVET does not give learners good work opportunities and social status.* c) *TVET is not important because*	1.8 Identify possible misconceptions and stereotypes in your various TVET domains (NTS 3m). *Possible misconceptions and stereotypes* *TVET is reserved for people with little intellectual endowment hence they can't set targets and attain them, etc.*	10 mins

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its contribution to the economy of Ghana is insignificant.

d) *Persons with disability cannot perform well in TVET education.*

1.9 Guide teachers to discuss possible ways to mitigate these misconceptions and stereotypes in TVET (NTS 3e, 3f and 3m).

*E.*g.

    a) *Invite role models/resource persons that have overcome these stereotypes and have achieved successes in their respective TVET domains within the society.*

    b) *Prepare/Use pre-recorded videos of persons who have defied these stereotypes and have achieve successes in the society*

    c. *Do community walk to expose students to the contribution of TVET to society*

    d. *Organize field trips to institutions for students to observe diversity in professions.*

    e. *Launch awareness campaigns, etc.*
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1.9 Discuss possible ways to mitigate these misconceptions and stereotypes in TVET (NTS 3e, 3f and 3m).

*E.*g.

    Invite role models/resource persons that have overcome these stereotypes and have achieved successes in their TVET domains within the society, etc.
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		1.10 Ask teachers to discuss possible activities they would adopt to develop the 21st century skills in their learners such as communication skills, collaboration, observation and enquiry skills, digital literacy, creativity and personal development (NTS 3a, 3e, 3h and 3j). *E.g.* a) *Learners doing PowerPoint presentations in groups.* b) *Project/research* c) *Role-play* d) *Hands-on activities in TVET paying attention to work ethics* e) *Panel presentations, etc.*	1.10 Discuss possible activities you would adopt to develop the 21st century skills in your learners such as communication skills, collaboration, observation and enquiry skills, digital literacy, creativity and personal development (NTS 3a, 3e, 3h and 3j). *E.g.* *Learners doing PowerPoint presentations in groups, etc.*	
2	**Planning for teaching, learning and assessment activities for the lesson/s with links to the TVET curriculum**	2.1 Ask teachers to discuss samples of their lesson plans in their various TVET domains based on the 2010 SHS Syllabus and link them to the concepts of LOs and LIs* *Sample Lesson Topics in the TVET domain:* *Sub-topic: Work ethics in Agriculture Home Economics, Technical skills and Visual Art* **a) Objectives** *By the end of the lesson learners will be able to;*	2.1 Discuss samples of your lesson plans in your various TVET domains based on the 2010 SHS Syllabus and link them to the concepts of LOs and Lis* *Sample Lesson Topics in the TVET domain:* *Sub-topic: Work ethics in Agriculture Home Economics, Technical skills and Visual Art* **a) Objectives** *By the end of the lesson learners will be able to;*	20 mins

	i. *Explain the concept work ethics as it pertains to TVET.* ii. *State at least four work ethics in Agriculture Home Economics, Technical skills and Visual Art.* iii. *Discuss qualities that promote good work ethics in Agriculture Home Economics, Technical skills and Visual Art.* **b) Core activities** i. *Guide learners in groups to explain the concept of work ethics.* ii. *Guide learners to identify and discuss in mixed ability/gender groups, what constitutes bad work ethic in TVET.* iii. *Guide learners to discuss the qualities that promote good work ethics in groups.* **c) Evaluation** i. *Evaluate the lesson by using question and answer method.* ii. *In groups, assign learners to visit any local workshop in the community to observe their work ethics and report.*	i. *Explain the concept work ethics as it pertains to TVET.* ii. *State at least four work ethics in Agriculture Home Economics, Technical skills and Visual Art.* iii. *Discuss qualities that promote good work ethics in Agriculture Home Economics, Technical skills and Visual Art.* **b) Core activities** i. *Guide learners in groups to explain the concept of work ethics.* ii. *Guide learners to identify and discuss in mixed ability/gender groups, what constitutes bad work ethic in TVET.* iii. *Guide learners to discuss the qualities that promote good work ethics in groups.* **c) Evaluation** i. *Evaluate the lesson by using question and answer method.* ii. *In groups, assign learners to visit any local workshop in the community to observe their work ethics and report.*	

	Teachers would be guided to tease out the learning outcomes and the learning indicators from the sample lesson plans outline.	* Tease out the learning outcomes and the learning indicators from the sample lesson plans outline.	
	LO: Demonstrate Knowledge and understanding of work ethics in Agriculture, Home Economics, Technical Skills and Visual Art.	LO: Demonstrate Knowledge and understanding of work ethics in Agriculture, Home Economics, Technical Skills and Visual Art.	
	LI 1.1 Explain work ethics in Agriculture, Home Economics, Technical Skills and Visual Art. E.g. Work ethics is a set of standards of behaviour and beliefs regarding what is and is not acceptable to do at work as it relates to the various TVET domains. Ref. https://www.valamis.com LI 1.2 Identify and discuss qualities that promote good work ethics in Agriculture, Home Economics, Technical Skills and Visual Art etc.	LI 1.1 Explain work ethics in Visual Agriculture, Home Economics, Technical Skills and Visual Art, etc.	

3	Teaching, learning and assessment	3.1 Guide teachers to identify gaps in their lesson plans (if any) and use their knowledge of learners' varied background to resolve them (NTS 1a, 2c, 2e and 2f). *E.g. Possible gaps:* a) *absence of differentiated teaching/learning methods* b) *inadequate teaching and learning resources, etc.* *Possible Solution:* a) *Teachers' lesson plan should show variety of teaching and learning strategies appropriate for learners with different abilities.* b) *improvisation (use of available local tools and materials), etc.*	3.1 Identify gaps in your lesson plans (if any) and use your knowledge of educational framework and curriculum to resolve them (NTS 1a, 2c, 2e and 2f). *E.g. Possible gaps:* a) *absence of differentiated teaching/learning methods* *Possible Solution:* *Teachers' lesson plan should show variety of teaching and learning strategies appropriate for learners with different abilities.*	20 mins
	▶ **Reading and discussion of the teaching and learning activities noting, addressing, and explaining areas where teachers may require clarification** ▶ **Noting opportunities for making *explicit* links to the Secondary School Curriculum** ▶ **Noting opportunities for integrating: GESI responsiveness and ICT and 21st C skills**			
		3.2 Ask teachers to suggest alternative ways of delivering the sample lessons. (NTS 3e, 3g and 3i) *E.g.* a) *Use extended learning* b) *Work-based learning, etc.*	3.2 Suggest alternative ways of delivering the sample lessons (NTS 3e, 3g and 3i). *E.g.* *Portfolio building, etc.*	

		3.3 In groups ask teachers to suggest other authentic assessment methods that could be used in the sample lesson (NTS 3k, 3l, 3m and 3n). *E.g.* a) *Observation* b) *Question & Answer,* c) *Reflective journals,* d) *Portfolio* e) *Peer and Self-assessment,* *etc.*	3.3 Suggest other authentic assessment methods that could be used in the sample lesson. (NTS 3k, 3l, 3m and 3n). *E.g.* *Observation*	
		3.4 Ask teacher to discuss how the lesson can make use of ICT resources to support relevant activities in the NTS (NTS 3j). *E.g.* a) *Pre-recorded videos on work ethics* b) *Photographs of some professionals working* c) *OERs/Internet search on work ethics* *PowerPoint presentation on work ethics projectors, etc.*	3.4 Discuss how the lesson can make use of ICT resources to support relevant activities in the NTS (NTS 3j). *E.g.* *Pre-recorded videos on work ethics.*	
		3.5 Ask one teacher to model a teaching activity in the sample lesson in any of the TVET using ICT. **(EXTENSION ACTIVITY)**	3.5 Model a teaching activity in the sample lesson in any of the TVET using ICT. **(EXTENSION ACTIVITY)**	
4	**Evaluation and review of session:** ▶ **Teachers need to identify critical friends to observe lessons and report at next session** ▶ **Identifying**	4.1 Ask teachers to brain- write two key ideas they are taking away from the lesson. 4.2 Ask them to share it with the larger group. 4.3 Ask teachers if there are any unresolved issues for clarification. 4.4 Remind teachers to identify a critical friend to observe them in	4.1 Brain-write two key ideas you are taking away from the lesson. 4.2 Share with the larger group 4.3 Raise any unresolved issues for clarification 4.4 Identify a critical friend to observe you in teaching your lessons in	15 mins

and addressing any outstanding issues relating to the lesson/s for clarification	teaching their lessons in relation to PLC Session 8 and provide feedback at the next PLC session. 4.5 Remind teachers to read Session 9 from the PLC Handbook in preparation for the next session.	relation to PLC Session 8 and provide feedback at the next PLC session. 4.5 Read Session 9 from the PLC Handbook in preparation for the next session.	219

TVET PLC Session 9: Managing the Learning Environment

NB. TVET Domain:
1. Agriculture
2. Home Economics
3. Technical Skills
4. Visual Art

	Guidance notes on Leading the session. *What the PLC Coordinator will have to say during each stage of the session*	Guidance Notes on Teacher Activity during the PLC Session. *What teachers will do during each stage of the session.*	Time in session
1. Review of previous session and introduction to new session **NB The guidance for PLC Coordinator should identify, address, and provide explanations for any areas where teachers might require clarification on an aspect of the lesson.** **NB PLC Coordinator should ask teachers to plan for their teaching as they go through the PLC session**	1.1 Start the session by asking teachers to share one thing they did differently in the classroom and elsewhere based on the session on *knowledge of learners*, which they think impacted learning positively. 1.2 Ask teachers to discuss and summarise in a single sentence why they think what a colleague did by way of application of lessons learned in the session on *knowledge of learners*, supported learning.	1.1 Share one thing you did differently in the classroom and elsewhere based on the session on *knowledge of learners*, which you think impacted learning positively. 1.2 Discuss and summarise in a single sentence why you think what a colleague did by way of application of lessons learned in the session on *knowledge of learners*, supported learning.	**30 mins**

| | | 1.3 Ask a teacher to read NTS 3a, 3b and 3c and tease out the learning outcomes (LOs) and learning indicators (LIs) of the session for a discussion of the relationship between the LOs and the LI with colleagues (NTS 3a, 3b and 3c).

LO 1: Demonstrate the ability to plan and deliver (varied and challenging) lessons that achieved the intended learning outcomes.

LI 1.1 Exhibit a sample plan or forecast that indicate a long-term and short-term (termly, weekly and daily) plans showing clearly how learners are to progress within the context of the prescribed Senior High School curriculum and its expected learning outcomes.

LI 1.2 Describe how varied teaching and assessment strategies as well as ICT and GESI issues can be integrated in the teaching and learning process in the Senior High Schools.

LO 2: Demonstrate use of reflective practice and small-scale action research findings to improve teaching and learning.

LI 2.1 Identify at least one area to improve on each term. | 1.3 Read NTS 3a, 3b and 3c of and tease out the learning outcomes (LOs) and learning indicators (LIs) of the session for a discussion of the relationship between the LOs and the LI with colleagues (NTS 3a, 3b and 3c).

LO 1: Demonstrate the ability to plan and deliver (varied and challenging) lessons that achieved the intended learning outcomes.

LI 1.1 Exhibit a sample plan or forecast that indicate a long-term and short-term (termly, weekly and daily) plans showing clearly how learners are to progress within the context of the prescribed Senior High School curriculum and its expected learning outcomes.

LI 1.2 Describe how varied teaching and assessment strategies as well as ICT and GESI issues can be integrated in the teaching and learning process in the Senior High Schools.

LO 2: Demonstrate use of reflective practice and small- scale action research findings to improve teaching and learning.

LI 2.1 Identify at least one area to improve on each term. | |

	LI 2.2 Provide a gender responsive action plan to guide practice.	LI 2.2 Provide a gender responsive action plan to guide practice,	
	LI 2.3 Exhibit reflective journal showing the benefits of conducting lesson evaluation by teachers and learners.	LI 2.3 Exhibit of a reflective journal showing the benefits of conducting lesson evaluation by teachers and learners.	
	LO 3: Exhibit the ability to create a safe, encouraging learning environment.	LO 3: Exhibit the ability to create a safe, encouraging learning environment.	
	LI 3.1 Identify the elements of a safe and encouraging learning environment.	LI 3.1 Identify the elements of a safe and encouraging learning environment.	
	LI 3.2 Establish clear classroom rules and routine to promote positive behaviour among learners,	LI 3.2 Establish clear classroom rules and routine to promote positive behaviour among learners.	
	1.4 Lead teachers to discuss how TVET concepts can be employed in managing the learning environment.	1.4 Discuss how TVET concepts can be employed in managing the learning environment.	
	E.g. *Adaptation of safety rules as in the studios, workshops, farms and in the laboratories into all learning environment*	*E*.g. *Adaptation of safety rules as in the studios, workshops, farms and in the laboratories into all learning environment*	

	1.5 Ask teachers to identify other related areas of managing the learning environment that will enhance the teaching and learning of TVET. *E.g.* *Organizing:* a. *jury sessions to encourage peer assessment* b. *exhibition to promote self-assessment among learners* c. *work-based learning to enhance skills training, etc.*	1.5 identify other related areas of managing the learning environment that will enhance the teaching and learning of TVET. *E.g.* *Organizing:* *jury sessions to encourage peer assessment, etc.*	
Give regard for misconceptions, stereotypes, GESI, ICT, 21st century skills, etc.	1.6 In the TVET domain groups ask teachers to identify possible misconceptions and stereotypes in their various lesson topics for the week. *E.g.* *Lesson Topic:* *a) Agriculture: (General Management Practices of a Farm (Plant/animal), Machinery and Implements)* *b) Home Economics: Kitchen Safety and Sanitation* *c) Technical Skills: Health Safety and Protection* *d) Visual art: Studio Maintenance*	1.6 In your TVET domain groups identify possible misconceptions and stereotypes in your various lesson topics for the week. *E.g.* *Lesson Topic:* *a) Agriculture: (General Management Practices of a Farm (Plant/animal), Machinery and Implements)* *b) Home Economics: Kitchen Safety and Sanitation* *c) Technical Skills: Health Safety and Protection* *d) Visual art: Studio Maintenance*	10 mins

	Possible misconceptions and stereotypes i. *Agriculture: care for agricultural tools, implements, animals and plants are for males and difficult for females.* ii. *Home Economics: cleaning and care for the Kitchen is for females and not males* iii. *Technical skills: wearing of boots and other protective gears are for able bodied persons and not suitable and appropriate for learners with SEN.* iv. *Visual Art: Visual art learners are dirty, etc.* 1.7 Guide teachers to discuss possible ways to mitigate these misconceptions and stereotypes in TVET.	*Possible misconceptions and stereotypes* i. *Agriculture: care for agricultural tools, implements, animals and plants are for males and difficult for females.* ii. *Home Economics: cleaning and care for the Kitchen is for females not males* iii. *Technical skills: wearing of boots and other protective gears are for males and not suitable and appropriate for learners with SEN.* iv. *Visual Art: Visual art learners are dirty, etc.* 1.7 Discuss possible ways to mitigate these misconceptions and stereotypes in TVET.	

	E.g. a) *Invite a role model who has achieved success in their respective fields of TVET (either female, male or/and person with SEN) as resource persons to interact with learners as a way of helping learners to overcome these stereotypes in Agriculture, Home Economics, and Visual Art* b. *Prepare and use pre-recorded videos of persons who have defied these stereotypes and have achieve successes in various TVET production activities within the local community and beyond* c. *Do community walk or undertake a field trip to expose learners to clean studios, kitchens and workshops in TVET.* 1.8 Ask teachers to discuss possible	*E.g.* *Invite a role model who has achieved success in their respective fields of TVET (either female, male or/and person with SEN) as resource persons to interact with learners as a way of helping learners to overcome these stereotypes in Agriculture, Home Economics, and Visual Art* 1.8 Discuss possible activities you would adopt to develop	

	activities they would adopt to develop 21st century skills in their learners such as creativity, communication skills, collaboration, observation and enquiry skills, digital literacy and personal development skills. *E.g.* a) *Group learners into mixed ability groups to clean workshops, studios, kitchens and farms* b) *engage technology to monitor learners' behaviour in the workshops, studios, kitchens and farms* c) *give equal opportunity to all learners to play leadership roles, etc.* d) *give opportunity to learners to innovate new ways of keeping workshops, studios, kitchens and farms safe and clean.*	21st century skills in their learners such as creativity, communication skills, collaboration, observation and enquiry skills, digital literacy and personal development skills. *E.g.* *Group learners into mixed ability groups to clean workshops, studios, kitchens and farms, etc.*	
2. **Planning for teaching, learning and assessment activities for the lesson/s making links to the TVET curriculum**	2.1 In their TVET domain groups ask teachers to discuss their sample lesson plans based on the 2010 SHS Syllabus and link them to any of the LOs and LIs of the PLC session* *Sample Lesson Topics in the TVET domains for the week:*	2.1 In your TVET domain groups discuss your sample lesson plans based on the 2010 SHS Syllabus and link them to the concepts of LOs and Lis* *Sample Lesson Topics in the TVET domains for the week:*	20 mins

		Lesson Topic:	Lesson Topic:	
		a) Agriculture: (General Management Practices of a Farm (Plant/animal/Machinery and Implements).	a) Agriculture: (General Management Practices of a Farm (Plant/animal/Machinery and Implements)	
		b) Home Economics: Kitchen Safety and Sanitation.	b) Home Economics: Kitchen Safety and Sanitation)	
		c) Technical Skills: Health Safety and Protection.	c) Technical Skills: Health Safety and Protection	
		d) Visual art: Studio Maintenance	d) Visual art: Studio Maintenance	
		a) Objectives: By the end of the lesson, learners will be able to: i. State how to ensure safety and protection practices on the farm (as regards plant and animal machinery and implements), kitchen, laboratories, workshops and studios before, during and after work, E.g. **Before work**: Clean workshops, laboratories. Studios, etc. before the start of work making sure the environment is free of accident-causing items such as water, oil, cutting and piercing object on the floor etc. **During Work:** Use appropriate tools in the right way(s)	**a) Objectives:** By the end of the lesson, learners will be able to: i. State how to ensure safety and protection practices on the farm (as regards plant and animal machinery and implements), kitchen, laboratories, workshops and studios before, during and after work, E.g. **Before work**: Clean workshops, laboratories. Studios, etc. before the start of work making sure the environment is free of accident-causing items such as water, oil, cutting and piercing object on the floor etc. **During Work:** Use appropriate tools in the right way(s)	

		After work:	*After work:*	
		I. Clean floors and tools, pack and cover equipment, tools and materials at their appropriate places, switch off machines and electrical gadgets, close windows, doors and cabinets, etc.	I. Clean floors and tools, pack and cover equipment, tools and materials at their appropriate places, switch off machines and electrical gadgets, close windows, doors and cabinets, etc.	
		ii. Demonstrate through hands-on activity safety and protection practices on the farms, kitchens, laboratories, workshops and studios,	ii. Demonstrate through hands-on activity safety and protection practices on the farms, kitchens, laboratories, workshops and studios,	
		iii. Develop at least five safety rules on the farms, kitchens, laboratories, workshops and studios, etc.	iii. Develop at least five safety rules on the farms, kitchens, laboratories, workshops and studios, etc.	

		b) **Core activities:**	b) **Core activities:**	
		i. *Guide learners to state five safety rules on the farm, kitchen, laboratories, workshops and studios,*	I. *Guide learners to state five safety rules on the farm, kitchen, laboratories, workshops and studios,*	
		ii. *Demonstrate through simulation/ demonstration basic safety and protection practices on the farms kitchens, laboratories, workshops and studios for learners to observe.*	II. *Demonstrate through simulation / demonstration basic safety and protection practices on the farms kitchens, laboratories, workshops and studios for learners to observe.*	
		iii. *Guide learners to surf OERs and other sources on the Internet to discover other safety and protection practices elsewhere.*	III. *Guide learners to surf OERs and other sources on the Internet to discover other safety and protection practices elsewhere.*	
		iv. *Guide learners to try their hands on basic safety and protection practices on the farms, kitchens, laboratories, workshops and studios*	IV. *Guide learners to try their hands on basic safety and protection practices on the farms, kitchens, laboratories, workshops and studios*	
		v. *Put learners in mixed ability/gender groups (where possible) to formulate simple safety and protection rules for the farms, kitchens, laboratories, workshops and studios.*	v. *Put learners in mixed ability/gender groups (where possible) to formulate simple safety and protection rules for the farms, kitchens, laboratories, workshops and studios.*	

	c) Evaluation: i. Evaluate learners progress by providing check lists for learners to use to re-enact basic safety and protection practices on farms, kitchens, laboratories, workshops and studios, etc. ii. Organise a jury session for learners to assess themselves and their peers' work. *Teachers would be guided to tease out the learning outcomes and the learning indicators from the sample lesson plans outline.* 2.2 Ask teachers to tease out the LOs and Lis from the sample lesson. *LO: Demonstrate Knowledge and understanding of the different learning environments in the respective TVET domains* *LI 1.1 State at least 2 learning environments in your TVET domain,* *LI 1.2: Discuss how to enforce safety rules in the different learning environments*	**Evaluation:** I. Evaluate learners progress by providing check lists for learners to use to re-enact basic safety and protection practices on farms, kitchens, laboratories, workshops and studios, etc. II. Organise a jury session for learners to assess themselves and their peers' work. ** Tease out the learning outcomes and the learning indicators from the sample lesson plans outline.* 2.2 Tease out the Los and Lis from the sample lesson. *LO: Demonstrate Knowledge and understanding of the different learning environments in the respective TVET domains* *LI 1.1 State at least 2 learning environments in your TVET domain, etc.*	

	LI 1.3 Discuss at least 5 ways of ensuring safety precautions before, during and after production in Visual Art, Technical Skills, Home Economics, and Agriculture, etc.		
3. **Teaching, learning and assessment** **Reading and discussion of the teaching and learning activities noting, addressing, and explaining areas where teachers may require clarification** ▶ **Noting opportunities for making *explicit* links to the Secondary School Curriculum** ▶ **Noting opportunities for integrating: GESI responsiveness and ICT and 21st C skills**	3.1 Ask teachers to discuss how the NTS 3a, 3b and 3c) i.e., Managing the Learning Environment will help to promote teaching and learning of TVET in the Senior High Schools. *E.g.* *a) Ensure safety of all learners* *b) Promote responsible behaviour among teachers and learners in the learning environment* *c) Facilitate inclusivity and tolerance of all learners and their peculiarities during the learning process, etc.*	3.1 Discuss how the NTS 3a, 3b and 3c) i.e., Managing the Learning Environment will help to promote teaching and learning of TVET in the Senior High Schools. *E.g.* *Ensure safety of all learners, etc.*	20 mins

▶ **Reading, discussion, and identification of continuous assessment opportunities in the lesson. Each lesson should include at least two opportunities to use continuous assessment to support student teacher learning** ▶ **Resources:** ○ **Links to the existing PD Themes, for example, action research, questioning and to other external reference material: literature, on web, YouTube, physical resources, power point; how they should be used.** ○ **Consideration needs to be given to local availability guidance on any power point presentations, TLM or other resources which need to be developed to support learning**	3.2 Ask teachers to suggest alternative ways of delivering the sample lessons. *E.g., use of:* 　*a) work-based learning to provides opportunity for learners to engage in Hands-on- activities in maintain and cleaning the studios, kitchens, workshops or the farms* 　*b) pre-recorded video to show how variety of TVET studios, kitchens, workshops or farms safety rules apply* 　*c) library/internet resources and mass media discussions on safety practices in the studios, kitchens, workshops and the farms* 　*d) field trip/ community walks to observe best practices in studios, kitchens, workshops or in the farms elsewhere.* 　*e) use of resource persons to organize demonstration lessons*	3.2 Suggest alternative ways of delivering the sample lessons. *E.g., use of:* 　*a) work-based learning to provides opportunity for learners to engage in Hands-on-activities in*	

	3.3 Ask teachers to review their sample lesson plans to identify activities that promote GESI responsiveness.
	
	E.g.
	   a) *classroom arrangement to promote group and teamwork among learners of different socio-economic and religious background.*
	   b) *mixed ability/gender groupings to facilitate the development of collaborative skills*
	   c) *non-stereotype role-play to dispel social stereotyping among learning*
	   d) *using positive language to give feedback to encourage active involvement of learners especially female and SEN learners.*
	   e) *engage learners to set up classroom rules and routine to prevent unwanted behaviour among learners during practical activities*
		3.3 Review your sample lesson plans to identify activities that promote GESI responsiveness,
		
		E.g.
		   a) *classroom arrangement to promote group and teamwork among learners of different socio-economic and religious background, etc.*	

| | | 3.4 Ask teachers (in their domain groups where possible) to suggest authentic assessment methods that could be used in the sample lesson.

E.g.
  a) Jury to promote self-appraisal among learners.
  b) Peer assessment
  c) Observation and hands-on-activity in safety, protection and cleaning of studios, kitchens, workshops and farms, etc.
  d) Portfolio

3.6 Invite one teacher to model a sample lesson in any of the TVET domains taking due cognizance of the learning environment.
(EXTENSION ACTIVITY) | 3.4 In your domain groups (where possible) to suggest authentic assessment methods that could be used in the sample lesson.

E.g.
  a) jury to promote self- appraisal among learners, etc.

3.6 Model a sample lesson in any of the TVET domains taking due cognizance of the learning environment.
(EXTENSION ACTIVITY) | |
| 4 | **Evaluation and review of session:**

▶ **Teachers need to identify critical friends to observe lessons and report at next session**
▶ **Identifying and addressing any outstanding issues relating to the lesson/s for clarification** | 4.1 Ask teachers in their TVET domain to write and share what they have learnt in the session on a flip chat.

4.2 Ask if teachers they need any further clarification

4.3 Remind teachers to invite a critical friend to observe them in teaching their lessons in relation to PLC Session 9 and provide feedback at the next PLC session.

4.4 Remind teachers to read Session 10 from the PLC Handbook in preparation for the next session. | 4.1 In your TVET domain, write and share what you have learnt in the session on a flip chat

4.2 Ask questions on any issue that need further clarification.

4.3 Invite a critical friend to observe you in teaching your lessons in relation to PLC Session 9 and provide feedback at the next PLC session.

4.4 Read Session 10 from the PLC Handbook in preparation for the next session. | 15 mins |

TVET PLC Session 10: Teaching and Learning

NB. TVET Domain:
      1. Agriculture
      2. Home Economics
      3. Technical Skills
      4. Visual Art

	Guidance notes on Leading the session. *What the PLC Coordinator will have to say during each stage of the session*	Guidance Notes on Teacher Activity during the PLC Session. *What teachers will do during each stage of the session.*	Time in session
1. **Review of previous session and introduction to new session**	1.1 Start the session by asking teachers to share one thing they did differently in the classroom and elsewhere based on the session on *managing the learning environment*, which they think impacted learning positively. 1.2 Ask teachers to discuss and summarise in a single sentence why they think what a colleague did by way of application of lessons learned in the session on *managing the learning environment*, supported learning.	1.1 Share one thing you did differently in the classroom and elsewhere based on the session on *managing the learning environment*, which you think impacted learning positively. 1.2 Discuss and summarise in a single sentence why you think what a colleague did by way of application of lessons learned in the session on *managing the learning environment*, supported learning.	**30 mins**

			25 mins
NB The guidance for PLC Coordinator should identify, address, and provide explanations for any areas where teachers might require clarification on an aspect of the lesson. **NB PLC Coordinator should ask teachers to plan for their teaching as they go through the PLC session**	1.3 Ask a teacher to read NTS 3d, 3e, 3f, 3g, 3h, 3i, 3j, 3k and 3l of the NTS under the sub-domain *Teaching and Learning*, tease out possible learning outcomes (LOs) and learning indicators (LIs) for the session and compare them with the LOs and Lis listed below. LO 1: Demonstrate understanding and skill in using variety of teaching strategies that encourages learner participation and critical thinking. LI 1.1 identify at least four teaching strategies in teaching and learning. LI 1.2 Explain how teaching strategies will help learner participation and critical thinking. ref. https://flippedlearning.org LO 2: Demonstrate the skill of involving all learners including girls and SEN learners. LI 2.1 Explain how all learners especially girls and learners with SEN can be involved in teaching and learning process. LI 2.2 Identify at least five teaching and learning resources that could help learners especially girls and SEN to ensure their progression.	1.31 Read NTS 3d, 3e, 3f, 3g, 3h, 3i, 3j, 3k and 3l of the NTS under the sub- domain *Teaching and Learning*, tease out possible learning outcomes (LOs) and learning indicators (LIs) for the session and compare them with the LOs and Lis listed below. LO 1: Demonstrate understanding and skill in using variety of teaching strategies that encourages learner participation and critical thinking. LI 1.1 identify at least four teaching strategies in teaching and learning. LI 1.2 Explain how teaching strategies will help learner participation and critical thinking. ref. https://flippedlearning.org LO 2: Demonstrate the skill of involving all learners including girls and SEN learners. LI 2.1 Explain how learners especially girls and SEN can be involved in teaching and learning. LI 2.2 Identify at least five teaching and learning resources that could help learners especially girls and SEN to ensure their progression.	

		LO 3: Demonstrate knowledge and skill of using a variety of teaching and learning resources including ICT that enhance learning	LO 3: Demonstrate knowledge and skill of using a variety of teaching and learning resources including ICT that enhance learning.	
		LI 3.1 Identify at least five teaching and learning resources.	LI 3.1 Identify at least five teaching and learning resources.	
		LI 3.2 Examine how the teaching and learning resources including ICT will enhance learning.	LI 3.2 Examine how the teaching and learning resources including ICT will enhance learning.	
		1.4 Guide teachers to identify and discuss how TVET knowledge (as it relates the various domains) is articulated within teaching and learning activities in the SHS syllabus (NTS 2a, 2e and 3h).	1.4 Identify and discuss how TVET knowledge (as it relates the various domains) is articulated within teaching and learning activities in the SHS syllabus (NTS 2a, 2e and 3h).	
		E.g.	*E.g.*	
		The 2010 SHS Syllabus in the various TVET domains is designed to equip learners with scientific knowledge and practical skills to make them ready for higher education and the job market.	*The 2010 SHS Syllabus in the various TVET domains is designed to equip learners with scientific knowledge and practical skills to make them ready for higher education and the job market.*	
		1.5 Ask teachers to identify specific teaching and learning strategies that enhance the delivery of TVET lessons (NTS 2c, 2d, 2e).	1.5 Identify specific teaching and learning strategies that enhance the delivery of TVET lessons (NTS 2c, 2d, 2e).	

	E.g. a) *Competency Based Training (CBT)* b) *Experiments* c) *educational field trip* d) *Simulated games* e) *Project based learning* f) *Flipped classrooms* g) *Design thinking,* h) *Reverse brainstorming etc.*	*E.g.* *Competency Based Training (CBT),, etc.*	
Give regard for misconceptions, stereotypes, GESI, ICT, 21st century skills, etc.	1.6 Ask teachers to identify possible misconceptions and stereotypes in their various TVET lesson topics for the week (NTS 3m). *E.g.* *Lesson Topic: Enterprise Management in:* *a) Agriculture* *b) Home Economics* *c) Technical Skills* *d) Visual art*	1.6 Identify possible misconceptions and stereotypes in your TVET lesson topics for the week (NTS 3m). *E.g.* *Lesson Topic: Enterprise Management in:* *a) Agriculture* *b) Home Economics* *c) Technical Skills* *d) Visual art*	10 mins

	Possible misconceptions and stereotypes a) *Home Economics: One requires a lot of money to start up a business.* b) *Visual Art: it is difficult to break into the existing business environment.* c) *Agriculture: You have to start with mechanized farming to be able to make profit.* d) *You need sophisticated machinery in Technical skills careers.* 1.7 Guide teachers to discuss possible ways to mitigate these misconceptions and stereotypes in TVET (NTS 3e, 3f and 3m). *E.g.* a) *Invite someone who has nurtured and grown a business to share his experience with students.* b) *Educate students on business incubation.* c) *Do community walk to expose students to the contribution of TVET to society* d) *Organize field trips for students to visit the business incubation centers, etc.*	*Possible misconceptions and stereotypes* a) *Home Economics: One requires a lot of money to start up a business.* b) *Visual Art: it is difficult to break into the existing business environment.* c) *Agriculture: You have to start with mechanized farming to be able to make profit.* d) *You need sophisticated machinery in Technical skills careers.* 1.7 Discuss possible ways to mitigate these misconceptions and stereotypes in TVET (NTS 3e, 3f and 3m). *E.g.* *Invite someone who has nurtured and grown a business to share his experience with students, etc.*	

		1.8 Ask teachers to discuss possible activities they would adopt to develop the 21st century skills in their learners such as *communication skills, collaboration, observation and enquiry skills, digital literacy, creativity and personal development* (NTS 3a, 3e, 3h and 3j). *E.g.* a) *Group students to do PowerPoint presentation.* b) *project/research* c) *Role-play* d) *Fieldtrip* e) *Panel presentation*	1.8 Discuss possible activities you would adopt to develop the 21st century skills in your learners such as *communication skills, collaboration, observation and enquiry skills, digital literacy, creativity and personal development* (NTS 3a, 3e, 3h and 3j). *E.g.* a) *Group students to do PowerPoint presentation.* b) *Project/research* c) *Role-play* d) *Fieldtrip* e) *panel presentation*	
2	**Planning for teaching, learning and assessment activities for the lesson/s with links to the TVET curriculum**	2.1 Ask teachers to discuss samples of their lesson plans in their various TVET domains and use their knowledge in teaching and learning to deliver the lessons* *Sample Lesson Topics in the TVET domain:* *Topic: Entrepreneurial skills Sub-topic: Enterprise Management in visual Art, Home Economics, Agriculture and Technical skills.* a) ***Objectives*** *By the end of the lesson learners will be able to;*	2.1 Discuss samples of their lesson plans in their various TVET domains and use their knowledge in teaching and learning to deliver the lessons *Sample Lesson Topics in the TVET domain:* *Topic: Entrepreneurial skills* *Sub-topic: Enterprise Management in visual Art, Home Economics, Agriculture and Technical skills.* a) ***Objectives*** *By the end of the lesson learners will be able to;*	20 mins

	i. Mention at least four business enterprises. ii. State at least three factors to consider when setting up business enterprise. iii. Identify the elements of the business plan. **b) Core activities** i. Guide learners in their groups to surf and discuss business enterprises they identified. ii. Guide learners to state and discuss factors to consider when setting up a business enterprise in their various groups. iii. In groups, guide learners to surf and discuss elements of business plans for presentation. **c) Evaluation** *Evaluate the lesson by using question and answer method.* **Teachers would be guided to tease out the learning outcomes and the learning indicators from the sample lesson plans outline.* 2.2 Ask teachers to tease LOs and LIs from sample lessons. *E.g.* *LO: Exhibit the essential skills of managing Enterprise in TVET.* *LI 1.1 Mention at least four TVET based business enterprises.*	i. Mention at least four business enterprises. ii. State at least three factors to consider when setting up business enterprise. iii. Identify the elements of the business plan. **b) Core activities** i. Guide learners in their groups to surf and discuss business enterprises they identified. ii. Guide learners to state and discuss factors to consider when setting up a business enterprise in their various groups. iii. In groups, guide learners to surf and discuss elements of business plans for presentation. **c) Evaluation** *Evaluate the lesson by using question and answer method.* **Tease out the learning outcomes and the learning indicators from the sample lesson plans outline.* 2.2 Ask teachers to tease LOs and LIs from sample lessons *E.g.* *LO: Exhibit the essential skills of managing Enterprise in TVET.* *LI 1.1 Mention at least four TVET based business enterprises, etc.*	

	LI 1.2 State at least three factors to consider when setting up a TVET based business enterprise. *LI 1.3 Identify the elements of the business plan.*		

3 Teaching, learning and assessment
 	
Reading and discussion of the teaching and learning activities noting, addressing, and explaining areas where teachers may require clarification
▶ **Noting opportunities for making *explicit* links to the Secondary School Curriculum**
▶ **Noting opportunities for integrating: GESI responsiveness and ICT and 21ˢᵗ C skills**
	3.2 Ask teachers to suggest alternative ways of delivering the sample lessons (NTS 2h, 2i and 2j).
	E.g. use of:
	a) pre-recorded video to show variety of enterprise management
	b) library/internet resources and discussions
	c) field trip
	d) community walk
	e) use of local or indigenous entrepreneur mentors
	f) use of enterprise management test.
	g) use of experiential learning etc.
	
	3.3 Ask teachers to review their sample lesson plans to identify activities that promote GESI responsiveness.
	E.g.
	a) mixed ability/gender groupings
	b) non-stereotype role play
	c) using positive feedback to students especially female and SEN students
	d) use of local entrepreneurs who have defied stereotyping/ stigma to succeed in TVET business as mentors and resource persons to inspire learners
		3.2 Suggest alternative ways of delivering the sample lessons (NTS 2h, 2i and 2j).
		E.g. use of:
		    pre-recorded video to show variety of enterprise management
		
		3.3 Review your sample lesson plans to identify activities that promote GESI responsiveness.
		
		E.g.
		    mixed ability/gender groupings, etc.
			20 mins

		3.4 Ask teachers to discuss resources that can be used to support teaching and learning in the sample lesson NTS (NTS 3j).
		
		E.g.
		  Pre-recorded videos, photographs
		of some entrepreneurs, OERs/internet facilities, projectors, etc.
		
		3.5 Ask a teacher to model a teaching activity in the sample lesson in any of the TVET domain taking due cognizance of any of the LO and LIs of the PLC session.
		(EXTENSION ACTIVITY)
			3.4 Discuss resources that can be used to support teaching and learning in the sample lesson NTS (NTS 3j).
			
			E.g.
			  Pre-recorded videos, photographs of some entrepreneurs, OERs/internet facilities, projectors, etc.
			
			3.5 Model a a teaching activity in the sample lesson in any of the TVET domain taking due cognizance of any of the LO and LIs of the PLC session.
			(EXTENSION ACTIVITY)	

4	**Evaluation and review of session:** ▶ **Teachers need to identify critical friends to observe lessons and report at next session** ▶ **Identifying and addressing any outstanding issues relating to the lesson/s for clarification**	4.1 Ask teachers in pairs to share what they have learnt in the session 4.2 Invite the pair to share it with the larger group. 4.3 Ask teachers if there are any further questions for clarification. 4.4 Remind teachers to identify a critical friend to observe them in teaching their lessons in relation to PLC Session 9 and provide feedback at the next PLC session. 4.5 Remind teachers to read Session 10 from the PLC Handbook in preparation for the next session.	4.1 In pairs, share what you have learnt in this session. 4.2 Share with the larger group 4.3 Ask questions on any issue that need further clarification. 4.4 Identify a critical friend to observe you in teaching your lessons in relation to PLC Session 9 and provide feedback at the next PLC session. 4.5 Read Session 10 from the PLC Handbook in preparation for the next session.	10 mins

TVET PLC Session 11: Assessment

NB. TVET Domain:
      1. Agriculture
      2. Home Economics
      3. Technical Skills
      4. Visual Art

	Guidance notes on Leading the session. *What the PLC Coordinator will have to say during each stage of the session*	Guidance Notes on Teacher Activity during the PLC Session. *What teachers will do during each stage of the session.*	Time in session
1. Review of previous session and introduction to new session	1.1 Start the session by asking teachers to share one thing they did differently in the classroom and elsewhere based on the session on *managing the learning environment*, which they think impacted learning positively. 1.2 Ask teachers to discuss and summarise in a single sentence why they think what a colleague did by way of application of lessons learned in the session on *managing the learning environment*, supported learning.	1.1 Share one thing you did differently in the classroom and elsewhere based on the session on *managing the learning environment*, which you think impacted learning positively. 1.2 Discuss and summarise in a single sentence why you think what a colleague did by way of application of lessons learned in the session on *managing the learning environment*, supported learning.	**30 mins**

NB The guidance for PLC Coordinator should identify, address, and provide explanations for any areas where teachers might require clarification on an aspect of the lesson. **NB PLC Coordinator should ask teachers to plan for their teaching as they go through the PLC session**	1.3 Ask a teacher to read NTS 3k, 3l, 3m, 3n, 3o and 3p and tease out possible learning outcomes (LOs) and learning indicators and compare them with the LOs and Lis listed below (LIs) of the session for a. LO 1: Demonstrate knowledge and skill in identifying through assessment and addressing learners' learning difficulties and misconceptions. LI1.1 Identify at least four learning difficulties among learners of TVET. LI1.2 State and discuss ways of helping learners of TVET to overcome learning difficulties and misconceptions. LI 1.3 Make appropriate referral of learners with learning difficulties to expertise attention. LO 2: Demonstrate skill in building meaningful records of learners using assessment and communicating same to the learners. LI 2.1 State the different types of assessment records of learners. LI 2.2 Keep a portfolio of students' works and progress report. LO 3: Demonstrate awareness of national and school level of assessment of learners.	1.3 Read NTS 3k, 3l, 3m, 3n, 3o and 3p and tease out possible learning outcomes (LOs) and learning indicators and compare them with the LOs and Lis listed below (LIs) of the session for a. LO 1: Demonstrate knowledge and skill in identifying through assessment and addressing learners' learning difficulties and misconceptions. LI1. 1 Identify at least four learning difficulties among learners of TVET. LI1.2 State and discuss ways of helping learners of TVET to overcome learning difficulties and misconceptions. LI 1.3 Make appropriate referral of learners with learning difficulties to expertise attention. LO 2: Demonstrate skill in building meaningful records of learners using assessment and communicating same to the learners. LI 2.1 State the different types of assessment records of learners. LI 2.2 Keep a portfolio of students' works and progress report. LO 3: Demonstrate awareness of national and school level of assessment of learners	

		LI 3.1 Develop assessment plan to guide assessment activities.	LI 3.1 Develop assessment plan to guide assessment activities.	
		LI 3.2 Apply national and school-based assessments tools at the appropriate time to enhance students' performance and progress.	LI 3.2 Apply national and school-based assessments tools at the appropriate time to enhance students' performance and progress.	
		LO 4: Demonstrate skill in using objective and predetermined criteria to assess TVET learners without comparing learner with learner.	LO 4: Demonstrate skill in using objective and predetermined criteria to assess TVET learners without comparing learner with learner.	
		LI 4.1 Identify the different tools/instruments to use in assessing and analyzing TVET students' results.	LI 4.1 Identify the different tools/instruments to use in assessing and analyzing TVET students' results.	
		LI 4.2 Analyze students results objectively without comparing learner with learner to enhance learners' progress.	LI 4.2 Analyze students results objectively without comparing learner with learner to enhance learners' progress.	
		1.4 Ask teachers to identify areas of assessment that will enhance their teaching (NTS 3k, 3p).	1.4 identify further areas of assessment that will enhance your teaching (NTS 3k, 3p).	
		E.g. a) **Assessment as learning** *– self assessment, self-reflection, observing others and providing feedback, etc.* b) **Assessment for learning** *– Portfolio, library research.* c) **Assessment of learning***- End of course project work and exhibition, etc.*	*E.g.* a) **Assessment as learning** *– self assessment, self-reflection, etc.*	

	1.5 Ask teachers to identify other related areas of assessment that will enhance the delivery of the TVET curriculum (3i, 3n).
	
	E.g.
	    a) observation
	    b) jury
	    c) peer-review
	    d) self-assessment,
	    e) peer-assessment,
	    f) Exhibition,
	    g) Appreciation, etc.
		1.5 Identify other related areas of assessment that will enhance the delivery of the TVET curriculum (3i, 3n).
		
		E.g.
		    Observation, etc.	

Give regard for misconceptions, stereotypes,
GESI, ICT, 21st century skills, etc.
	1.6 Ask teachers to identify possible misconceptions and stereotypes in their various TVET lesson topics for the week (NTS 3m).
	
	E.g.
	Lesson Topic: Project (end of course project work) in:
	    a) Agriculture
	    b) Home Economics
	    c) Technical Skills
	    d) Visual Art
	Possible misconceptions and stereotypes
	    a) perception from learners that project works are difficult to execute.
	    b) Teachers' perception that project works are difficult to assess.
	    c) some learners may find it difficult to undertake projects because of financial challenges.
	
	1.7 Guide teachers to discuss possible ways to mitigate these misconceptions and stereotypes in TVET (NTS 3e, 3f and 3m).
		1.6 Identify possible misconceptions and stereotypes in your various TVET lesson topics for the week (NTS 3m).
		
		E.g.
		Lesson Topic: Project (end of course project work) in:
		    a) Agriculture
		    b) Home Economics
		    c) Technical Skills
		    d) Visual Art
		Possible misconceptions and stereotypes
		    a) perception from learners that project works are difficult to execute, etc.
		
		1.7 Discuss possible ways to mitigate these misconceptions and stereotypes in TVET (NTS 3e, 3f and 3m).
			10 mins

	E.g. *a) Simplify the process by dividing the project execution plan into phases and provide a step-by-step approach to each phase.* *b) Provide project marking procedures and schemes to teachers* *c) Encourage learners to use local and zero cost materials for their projects.* *d) Encourage learners to work in mixed ability groups so that the haves can assist the have nots.* 1.8 Ask teachers to identify ways of incorporating ICT in their lesson (NTS 3j). *E.g.* *a) Take pictures of learners' works for reflective assessment after onsite assessment.*	*E.g.* *Simplify the process by dividing the project execution plan into phases and provide a step-by-step approach to each phase.* 1.8. Identify ways of incorporating ICT in your lesson (NTS 3j). *E.g.* *Take pictures of learners' works for reflective assessment after onsite assessment.*	

	b) Surf open educational resources (OERs) and other internet sources for information on how to execute and assess project works. c) Teach using power Point presentation. d) Employ computer software such AutoCAD, Photoshop, Coral Draw, Paint and other relevant tools ICT in teaching, executing and assessing project. e) Teacher interacts and monitor learners' progress of work via social media platforms. f) Learners submit progress of their project work through electronic media, etc.		
	1.9 Ask teachers to discuss possible activities they would adopt to develop the 21st century skills in their learners such as communication skills, collaboration, observation and enquiry skills, digital literacy, creativity and personal development (NTS 3a, 3e, 3h and 3j). *E.g.* a) *Encourage learners to work in mixed ability/gender groups.* b) *Encourage creativity and innovation through research and thinking outside the box activities.* c) *Organize jury sessions to facilitate appreciation and criticism of one's own and peer's works*	1.9 Discuss possible activities you would adopt to develop the 21st century skills in your learners such as communication skills, collaboration, observation and enquiry skills, digital literacy, creativity and personal development (NTS 3a, 3e, 3h and 3j). *E.g.* *Encourage learners to work in mixed ability/gender groups.* .	

2. Planning for teaching, learning and assessment activities for the lesson/s with links to the TVET curriculum	2.1 Ask teachers to discuss samples of their lesson plans in their various TVET domains and link them to assessment * *Sample Lesson Topics in the TVET domain:* *Topic: Project work in Visual Art, Home Economics, Agriculture and Technical skills.* *a) Objectives* *By the end of the lesson learners will be able to;* *i. Identification of a challenge that require solution.* *ii. Design and produce artifact/a model farm in the various TVET domains.* *iii. Write a comprehensive project report including an appreciation of artifacts/model farms stating and explain any symbolisms used.*	2.1 Discuss Ask teachers to discuss samples of their lesson plans in their various TVET domains and link them to assessment * *Sample Lesson Topics in the TVET domain:* *Topic: Project work in visual Art, Home Economics, Agriculture and Technical skills.* *a) Objectives* *By the end of the lesson learners will be able to;* *i. Identification of a challenge that require solution.* *ii. Design and produce artifact/a model farm in the various TVET domains.* *iii. Write a comprehensive project report including an appreciation of artifacts/model farms stating and explain any symbolisms used.*	20 mins

b) Core activities: i. Guide learners to identify challenges that require solution in the community ii. Guide learners to design a solution using the ideation process. iii. Guide learners to execute the artifact/model farm, in the various TVET domains using a phase to phase and a step-by-step approach at each stage. iv. Guide learners in groups to write a project report including an appreciation of their artifact/farm. **c) Evaluation:** *Evaluate the lesson by organizing jury session, and an exhibition to help each learner to improve upon their own abilities.* **Teachers would be guided to tease out the learning outcomes and the learning indicators from the sample lesson plans outline.* 2.2 Ask teachers to tease out LOs and LIs from the sample lesson *LO: Design and execute projects in Agriculture, Home Economics, Technical Skills and Visual Art.*	**b) Core activities** i. Guide learners to identify challenges that require solution in the community ii. Guide learners to design a solution using the ideation process. iii. Guide learners to execute the artifact/model farm, in the various TVET domains using a phase to phase and a step-by-step approach at each stage. iv. Guide learners in groups to write a project report including an appreciation of their artifact/farm. **c) Evaluation:** *Evaluate the lesson by organizing jury session, and an exhibition to help each learner to improve upon their own abilities.* **Tease out the learning outcomes and the learning indicators from the sample lesson plans outline.* 2.2 Tease out LOs and LIs from the sample lesson *LO: Design and execute projects in Agriculture, Home Economics, Technical Skills and Visual Art.*	

	LI 1.1 Design and produce:
	  a. **Agriculture** - *Model farm*
	  b. **Home Economics** – *Garment design.*
	  c. **Technical Skill** – *Design of a circuit with a light bulb.*
	  d. **Visual Art** – *Collage*
	
	LI 1.2 State the step-by-step procedure of executing the project.
	E.g.
	  a) identification of the problem
	  b) undertake preliminary designs using the ideation process
	  c) gathering of appropriate tools and materials
	  d) Produce using the appropriate production processes and procedures
	  e) complete the work taking note of finishing procedures and finishes
	  f) exhibit the work
	
	LI 1.3 Write a project report including an appreciation of the artifact/farm
		LI 1.1 Design and produce:
		  i. **Agriculture** - *Model farm*
		  ii. **Home Economics** – *Garment design.*
		  iii. **Technical Skill** – *Design of a circuit with a light bulb.*
		  iv. **Visual Art** – *Collage*	

	3.1 Guide teachers to identify gaps in their lesson plans (if any) and use their knowledge of Assessment to resolve them (3k, 3o).
	
	E.g.
	Possible gaps:
	  a) lack of well-established TVET workshops/kitchen and model farms in the school
	  b) Inadequate time allocation on the school time table for elaborate project work
	  c) Inadequate tools to promote teaching and learning.
	
	Possible Solution:
	  a) Teachers should make creative use of available resources within the environment.
	  b) Teachers may adopt after official class lessons and weekends where feasible to accomplish projects
		3.1 Identify gaps in your lesson plans (if any) and use your knowledge of Teaching of Assessment to resolve them (3k, 3o).
		
		E.g.
		Possible gaps:
		  a) lack of well-established TVET workshops/kitchen and model farms in the school
		  b) Inadequate time allocation on the school time table for elaborate project work
		  c) Inadequate tools to promote teaching and learning.
		
		Possible Solution:
		  a) Teachers should make creative use of available resources within the environment.
		  b) Teachers may adopt after official class lessons and weekends where feasible to accomplish projects
			20 mins

	3.2 Ask teachers to suggest alternative ways of delivering the sample lessons (NTS 3e, 3g and 3i).
	
	E.g., use of:
	  a) Pre-recorded video to show variety of enterprise management
	  b) library/internet resources and discussions,
	  c) field trip
		3.2 Suggest alternative ways of delivering the sample lessons (NTS 3e, 3g and 3i).
		
		E.g., use of:
		    Pre-recorded video to show variety of enterprise management, etc.	

	d) *community walk*
	e) *use of entrepreneur mentors*
	f) *use of enterprise management test,*
	g) *use of experiential learning etc.*
	
	3.3 Ask teachers to review their sample lesson plans to identify activities that promote GESI responsiveness (NTS 3f, 3l and 3m).
	E.g.
	    a) *Mixed ability/gender groupings during project execution.*
	    b) *Using positive feedback to learners especially female and SEN students.*
	
	3.4 Ask teachers to discuss how the lesson is linked to the use of assessment tools and practices as assessment *for*, *as* and *of* learning (NTS 3k, 3l, 3m and 3n).
	E.g.
	    How to score practical lessons
	    a) *Develop a check list indicating stages of the process.*
	    b) *Identify skill(s) that must be acquired. Determine scores for each stage depending on the complexity of the skill.*
	    c) *Completed artefact must be scored on the following criteria*
	      ▶ *Evidence of Preliminary/idea development process*
		3.3 Review your sample lesson plans to identify activities that promote GESI responsiveness (NTS 3f, 3l and 3m).
		
		E.g.
		    Mixed ability/gender groupings during project execution, etc.
		
		3.4 Discuss how the lesson is linked to the use of assessment tools and practices as assessment *for*, *as* and *of* learning (NTS 3k, 3l, 3m and 3n).
		
		E.g.
		    How to score practical lessons
		      Develop a check list indicating stages of the process, etc.	

		▶ *Appropriate use of tools/material* ▶ *Draft/ craftsmanship (Composition-appropriate use of principles and elements of design, Colour and tone, etc. for 2-D works as in Visual Art, right and timely application of chemicals as in Agriculture, etc.)* ▶ *Originality/ creativity* ▶ *Suitability (NB if the work is not suitable it means all other areas of evaluation may be faulty).*		

	3.5 In groups ask teachers to suggest other authentic assessment methods that could be used in the sample lesson (NTS 3k, 3l, 3m and 3n).
	
	E.g.
	   a) Portfolio
	   b) Self-assessment
	   c) Peer-assessment
	   d) Exhibition
	
	3.6 Guide teachers to discuss how the session topic makes use of resources to support relevant activities in the NTS (NTS 3j).
	E.g.
	   a) *surfing OERs/internet facilities, to assess ideas for designs as well as procedures and processes*
	   b) *using Power Point to present reports,*
	   c) *publishing finished works via social media, etc.*
	
	3.7 Ask one teacher to model a teaching activity in the sample lesson in any of the TVET domains taking due cognizance of any of the LOs and LIs of the PLC session.
	(EXTENSION ACTIVITY)
		3.5 Suggest other authentic assessment methods that could be used in the sample lesson (NTS 3k, 3l, 3m and 3n).
		
		E.g.
		Portfolio, etc.
		
		3.6 Discuss how the session makes use of resources to support relevant activities in the NTS (NTS 3j).
		E.g.
		
		   Surfing OERs/internet facilities, to assess ideas for designs as well as procedures and processes, etc.
		
		3.7 Model a teaching activity in the sample lesson in any of the TVET domains taking due cognizance of any of the LOs and LIs of the PLC session.
		(EXTENSION ACTIVITY)	

4. **Evaluation and review of session:** ▶ **Teachers need to identify critical friends to observe lessons and report at next session** ▶ **Identifying and addressing any outstanding issues relating to the lesson/s for clarification**	4.1 Ask teachers in pairs to share what they have learnt in the session 4.2 Invite the pair to share it with the larger group. 4.3 Ask teachers if there are any further questions for clarification. 4.4 Remind teachers to identify a critical friend to observe them in teaching their lessons in relation to PLC Session 11 and provide feedback at the next PLC session. 4.5 Remind teachers to read Session 12 from the PLC Handbook in preparation for the next session.	4.1 In pairs, share what you have learnt in this session. 4.2 Share with the larger group 4.3 Ask questions on any issue that need further clarification. 4.4 Identify a critical friend to observe you in teaching your lessons in relation to PLC Session 11 and provide feedback at the next PLC session. 4.5 Read Session 12 from the PLC Handbook in preparation for the next session.	15 mins

TVET PLC Session 12: Training needs of Teachers

NB. TVET Domain:
1. Agriculture
2. Home Economics
3. Technical Skills
4. Visual Art

	Guidance notes on Leading the session. *What the PLC Coordinator will have to say during each stage of the session*	Guidance Notes on Teacher Activity during the PLC Session. *What teachers will do during each stage of the session.*	Time in session
1. **Review of previous session and introduction to new session**	1.1 Start the session by asking teachers to share one thing they did differently in the classroom and elsewhere based on the session on *managing the learning environment*, which they think impacted learning positively. 1.2 Ask teachers to discuss and summarise in a single sentence why they think what a colleague did by way of application of lessons learned in the session on *assessment* supported learning.	1.1 Share one thing you did differently in the classroom and elsewhere based on the session on *managing the learning environment*, which you think impacted learning positively. 1.2 Discuss and summarise in a single sentence why you think what a colleague did by way of application of lessons learned in the session on *assessment*, supported learning.	**30 mins**
NB The guidance for PLC Coordinator should identify, address, and provide explanations for any areas where teachers might require clarification on an aspect of the lesson. **NB PLC Coordinator should ask teachers to plan for their teaching as they go through the PLC session**	1.3 Ask teachers to read the background of the topic '**Training Needs of Teachers'** silently for about five minutes *Note:* *Background* *There are a number of skills and attributes a teacher needs to be effective in the classroom. These include:* a) ***Discipline Skills****: Discipline helps the teacher to be effective. It is a vital component of an effective classroom management. The teacher's discipline ensures that positive behaviour is encouraged in classrooms.*	1.3 Read the write-up about the background of the topic '**Training Needs of Teachers'** silently for about five minutes. *Note:* *Background* *There are a number of skills and attributes a teacher need to be effective in the classroom. These include:* a) ***Discipline Skills****: Discipline helps the teacher to be effective. It is a vital component of an effective classroom management. The teacher's discipline ensures that positive behaviour is encouraged*	

| | b) **Classroom Management Skills:** By ensuring good behaviour of learners, half of the teacher's battle is won. To be an effective teacher, you should also be able to help learners develop good study and work habits. Good classroom management skills start with setting ground rules to stress the importance of classroom dignity.

c) **Observation Skills:** It is the prime responsibility of teachers to have a thorough understanding of the cognitive, emotional and social development of learners. Since a classroom is filled with learners coming from different parental backgrounds, it is beneficial for a teacher to be aware of the learning capabilities of different learners. | in classrooms.

b) **Classroom Management Skills:** By ensuring good behaviour of learners, half of the teacher's battle is won. To be an effective teacher, you should also be able to help learners develop good study and work habits. Good classroom management skills start with setting ground rules to stress the importance of classroom dignity.

c) **Observation Skills:** It is the prime responsibility of teachers to have a thorough understanding of the cognitive, emotional and social development of learners. Since a classroom is filled with learners coming from different parental backgrounds, it is beneficial for a teacher to be aware of the learning capabilities of different learners. | |

	d) Learner Engagement Skills: *Teachers handle a lot of learners with different mentalities towards learning. While some learners demonstrate keen interest in learning, others are distracted at the smallest provocation. Hence, to be called an effective teacher, you should develop learner engagement skills so that you can motivate your learners.* **e) Strong Communication Skills:** *Teaching is all about communication. The ability of the teacher to transmit information to the learner in a manner acceptable to each learner is key in the teaching and learning process. The teacher must take note of the fact that different learners process information differently. Hence, it is very important for a teacher to possess effective communication skills to be able to address the needs of the variety of learners under their care.*	**d) Learner Engagement Skills:** *Teachers handle a lot of learners with different mentalities towards learning. While some learners demonstrate keen interest in learning, others are distracted at the smallest provocation. Hence, to be called an effective teacher, you should develop learner engagement skills so that you can motivate your learners.* **e) Strong Communication Skills:** *Teaching is all about communication. The ability of the teacher to transmit information to the learner in a manner acceptable to each learner is key in the teaching and learning process. The teacher must take note of the fact that different learners process information differently. Hence, it is very important for a teacher to possess effective communication skills to be able to address the needs of the variety of learners under their care.*	

	f) **Teaching Skills:** Teaching is described as a noble profession, it has the capacity to change the lives of learners for the better. Every effective teacher requires good inter-personal skills along with effective speaking and strong presentation skills. A teacher needs the following teaching skills to be effective in the classroom:
	  i. deep content knowledge
	 ii. different models of instructional strategies and assessment practices
	iii. knowledge of the learning and development of children and adults
	iv. clinical supervision skills
	v. the ability to model effective instructional and assessment practices
		f) **Teaching Skills:** Teaching is described as a noble profession, it has the capacity to change the lives of learners for the better. Every effective teacher requires good inter-personal skills along with effective speaking and strong presentation skills. A teacher needs the following teaching skills to be effective in the classroom:
		  i. deep content knowledge
		 ii. different models of instructional strategies and assessment practices
		iii. knowledge of the learning and development of children and adults
		iv. clinical supervision skills
		v. the ability to model effective instructional and assessment practices	

	g) **Subject Matter Expertise:** Every teacher has a specific area of specialization. Putting in years of teaching experience with the appropriate knowledge, skills and continuous professional development will enable teachers to be abreast of changes to the curriculum in their subject areas.	g) **Subject Matter Expertise:** Every teacher has a specific area of specialization. Putting in years of teaching experience with the appropriate knowledge, skills and continuous professional development will enable teachers to be abreast of changes to the curriculum in their subject areas.	

	h) Time Management Skills: *It is easy to get carried away by different aspects of teaching, but it is important for teachers to ensure that the curriculum is completed within the pre-defined time frame. Teachers should therefore attach importance to the time taken by learners to complete their assignments. Teachers should also follow strategies to organize their working day around educational and other priorities.* i) **Planning Skills:** *A teacher should be able to clearly plan what the objectives for each lesson are. Planning ahead of time allows a teacher to be more confident about what he/she is going to teach.* j) **Passion and Positivity:** *Being passionate about teaching is a pre-requisite*	**h) Time Management Skills:** *It is easy to get carried away by different aspects of teaching, but it is important for teachers to ensure that the curriculum is completed within the pre-defined time frame. Teachers should therefore attach importance to the time taken by learners to complete their assignments. Teachers should also follow strategies to organize their working day around educational and other priorities.* i) **Planning Skills:** *A teacher should be able to clearly plan what the objectives for each lesson are. Planning ahead of time allows a teacher to be more confident about what he/she is going to teach.* j) **Passion and Positivity:** *Being passionate about teaching is a pre-*	

	for becoming an effective teacher. When you are passionate, you can learn from experience and there would be a constant search for methods to improve yourself as a teacher. k) **Be a Team Player:** Every teacher should be an active member of a community of practice where they can draw on the expertise of others for the benefit of their learners. Learners on the other hand, would love to have teachers who are friendly and understand them rather than forcing them to learn. Working with learners as members of a team with a common goal and in a non- threatening manner would help them to contribute to the lesson while having fun. l) **Patience:** Managing a classroom full of learners is not the easiest of jobs. There may be some learners who would test teachers' patience. Teachers should not lose their temper during such testing time in order to produce positive outcomes.	requisite for becoming an effective teacher. When you are passionate, you can learn from experience and there would be a constant search for methods to improve yourself as a teacher. k) **Be a Team Player:** Every teacher should be an active member of a community of practice where they can draw on the expertise of others for the benefit of their learners. Learners on the other hand, would love to have teachers who are friendly and understand them rather than forcing them to learn. Working with learners as members of a team with a common goal and in a non- threatening manner would help them to contribute to the lesson while having fun. l) **Patience:** Managing a classroom full of learners is not the easiest of jobs. There may be some learners who would test teachers' patience. Teachers should not lose their temper during such testing time in order to produce positive outcomes.	
	Refer. *https://www.edsys.in/8-skills-teachers-require-effective-teaching/ Retrieved 5/04/2022*	*Refer.* *https://www.edsys.in/8-skills-teachers-require-effective-teaching/ Retrieved 5/04/2022*	

	1.4 Ask a teacher to read the appendix to the NTS which highlights the training needs of teachers, tease out possible learning outcomes (LOs) and learning indicators (LIs) and compare them with the LOs and LIs listed below. LO 1: Demonstrate knowledge and understanding of the training needs of teachers under the various Ranks (1 to 6). LI 1.1 Identify the training needs of teachers under the various Ranks (1, 2, 3, 4, 5 and 6). Refer to the appendix to the NTS. LI 1.2 Identify ways of meeting the training needs at each of the Ranks, i.e. (1, 2, 3, 4, 5 and 6). Refer to the appendix to the NTS. LI 1.3 List the resources needed to achieve the training needs at each of the Ranks for TVET (NTS 1b, 1c and 3j). LO 2: Demonstrate understanding of the rationale for the needs at the various levels. Refer to the appendix to the NTS.	1.4 Read the appendix to the NTS which highlights the training needs of teachers, tease out possible learning outcomes (LOs) and learning indicators (LIs) and compare them with the LOs and LIs listed below. LO 1: Demonstrate knowledge and understanding of the training needs of teachers under the various Ranks (1 to 6). LI 1.1 Identify the training needs of teachers under the various Ranks (1, 2, 3, 4, 5 and 6). Refer to the appendix to the NTS. LI 1.2 Identify ways of meeting the training needs at each of the Ranks, i.e. (1, 2, 3, 4, 5 and 6). LI 1.3 List the resources needed to achieve the training needs at each of the Ranks for TVET (NTS 1b, 1c and 3j). LO 2: Demonstrate understanding of the rationale for the needs at the various levels. Refer to the appendix to the NTS.	
	LI 2.1 Identify the professional roles the teacher will be expected to play at the various levels (NTS 1g). LI 2.2 Discuss the interrelatedness of the	LI 2.1 Identify the professional roles the teacher will be expected to play at the various levels (NTS 1g). LI 2.2 Discuss the interrelatedness of the	

	roles teachers play at the various levels (Ranks 1, 2, 3, 4, 5 and 6). LI 2.3 Discuss how the roles played by teachers at the various ranks promote teaching and learning (NTS 3e, 3f, 3g, 3h, 3i and 3j). LO 3: Demonstrate the skill of identifying possible training avenues and how to avail oneself for capacity building (NTS 1a, 1e and 3a). LI 3.1 List possible training avenues that a TVET teacher can access for capacity building (NTS 1b). LI 3.2 Discuss how the avenues listed in LI 3.1 will facilitate training for TVET teachers (NTS 1b). 1.4 Ask teachers to identify and list their own training needs in relation to the three main domains of the NTS (NTS 1a, 1b). *a) Professional values and attitudes.* *E.g.* *i) Compliance with Ministry of Education and GES ethical codes* *ii) Compliance with national education policies and framework), etc.* *b) Professional knowledge.*	roles teachers play at the various levels (Ranks 1, 2, 3, 4, 5 and 6). LI 2.3. Discuss how the roles played by teachers at the various levels to promote teaching and learning (NTS 3e, 3f, 3g, 3h, 3i and 3j). LO 3: Demonstrate the skill of identifying possible training avenues and how to avail oneself for capacity building (NTS 1a, 1e and 3a). LI 3.1 List possible training avenues that a TVET teacher can access for capacity building (NTS 1b). LI 3.2 Discuss how the avenues listed in LI 3.1 will facilitate training for TVET teachers (NTS 1b). 1.4 Identify and list your own training needs in relation to the three main domains of the NTS (NTS 1a, 1b). *a) Professional values and attitude.* *E.g.* *i) Compliance with Ministry of Education and GES ethical codes, etc.* *b) Professional knowledge.*	

	E.g.
	Models of learning and development of children (NTS 2a, 2b, 2c, 2d, 2e and 2f).
	c) *Professional practice. E.g.*
	   i. *Different models of instructional strategies and assessment practices*
	   ii. *Clinical supervision skills*
	   iii. *Ability to model effective instructional and assessment practices*
	   iv. *Model GESI compliance qualities in the classroom and beyond*
		E.g.
		Models of learning and development of children (NTS 2a, 2b, 2c, 2d, 2e and 2f).
		c) *Professional practice. E.g.*
		   Different models of instructional strategies and assessment practices etc.	

Give regard for misconceptions, stereotypes, GESI, ICT, 21st century skills, etc.	1.5 Ask teachers to identify possible misconceptions and stereotypes that affect training needs of the various TVET teachers (NTS 3m). **Possible misconceptions and stereotypes** a) *The perception that many in-service training programmes are usually geared towards preparing the generalized teacher and not suited for the TVET teacher* b) *The perception that pursuing further studies is expensive and must be borne by the employer* c) *Teachers think that going for in-service training and short courses is a waste of time and resources since it will not bring any*	1.5 Identify possible misconceptions and stereotypes that affect training needs of the various TVET teachers (NTS 3m). **Possible misconceptions and stereotypes** *The perception that many in-service training programmes are usually geared towards the generalized teacher and not suited for the TVET teacher, etc.*	10 mins

		immediate financial benefits.		
		1.6 Ask teachers to discuss possible ways to mitigate these misconceptions and stereotypes. *E.g.* a) *Encourage the formation of subject based associations to facilitate specialized in- service training for its members* b) *Sensitize teachers on the values of self-development as a way of positioning oneself for better opportunities in the future*	1.6 Discuss possible ways to mitigate these misconceptions and stereotypes. *E.g.* a) *Encourage the formation of subject based associations to facilitate specialized in-service training for its members*	
		1.7 Ask teachers to identify ICT skills training that would be useful for the TVET teacher (NTS 3j). *E.g.* q) *PowerPoint presentation skills* b) *Skills in the use of software like AutoCAD, Paint, Photo Shop, Coral Draw, goggle classroom, zoom, Microsoft teams, smart board, web conferencing, webinars, etc.*	1.7 Identify ICT skills training that would be useful for the TVET teacher (NTS 3j). *E.g.* *PowerPoint presentation skills, etc.*	
2	**Planning for teaching, learning and assessment activities for the lesson/s**	**2.1** Ask teachers to discuss samples of their lesson plans in their various TVET domains based on the 2010 SHS syllabus and linked to any of the LOs and LIs for the PLC session **.** **Sample Lesson Topics in the TVET domain**: *Topic: Project work in Agriculture, Home Economics, Technical skills and Visual Art.*	**2.1** Discuss samples of their lesson plans in their various TVET domains based on the 2010 SHS syllabus and linked to any of the LOs and LIs for the PLC session **.** **Sample Lesson Topics in the TVET domain**: *Topic: Project work in Agriculture, Home Economics, Technical skills and Visual Art.*	20 mins

		Sub-Topic:	*Sub-Topic*:	
		a) Agriculture - Model farms	a. Agriculture - Model farms	
		b) Home Economics – Garment design.	b. Home Economics – Garment design.	
		c) Technical Skills – Design circuit with a light bulb	c. Technical Skills – Design circuit with a light bulb	
		d) Visual Art – Collage	d. Visual Art – Collage	
		a) Objectives: *By the end of the lesson learners will be able to:*	*a) Objectives:* *By the end of the lesson learners will be able to:*	
		i. Identify at least four challenges to be addressed	i. Identify at least four challenges to be addressed	
		ii. Design suitable solutions following the ideation process	ii. Design suitable solutions following the ideation process	
		iii. Execute the project using the appropriate tools, materials, procedures and processes	iii. Execute the project using the appropriate tools, materials, procedures and processes	
		iv. Exhibit finished products for a jury session	iv. Exhibit finished products for a jury session	
		b) Core Activities	*b) Core Activities*	
		i. In groups, guide learners to research and come out with challenges in their immediate environment	i. In groups, guide learners to research and come out with challenges in their immediate environment	

	ii. *Guide learners through the ideation process to design appropriate solution(s) to resolve the challenges identified in (i) above* iii. *Guide learners to assemble appropriate tools and materials needed to execute the project* iv. *Guide learners with concept maps/flow chat/work plan/check list to execute the project paying attention to appropriate use of tools and materials* v. *Guide learners to write their project report/appreciation explaining any symbolisms used and their relevance to the work* vi. *Guide learners to exhibit the finished products for a jury session.* c) *Use jury session to evaluate the final project work.* *Teachers would be guided to tease out the learning outcomes and the learning indicators from the sample lesson plans outline.* *Note: Refer to PLC Session 6 for assessment procedures for practical works* 2.2 Ask teachers to tease out the LOs and the LIs from their sample lesson plans as in (2.1).	ii. *Guide learners through the ideation process to design appropriate solution(s) to resolve the challenges identified in (i) above* iii. *Guide learners to assemble appropriate tools and materials needed to execute the project* iv. *Guide learners with concept maps/flow chat/work plan/check list to execute the project paying attention to appropriate use of tools and materials* v. *Guide learners to write their project report/appreciation explaining any symbolisms used and their relevance to the work* vi. *Guide learners to exhibit the finished products for a jury session.* c) *Use jury session to evaluate the final project work.* *Tease out the learning outcomes and the learning indicators from the sample lesson plans outline.* *Note: Refer to PLC Session 6 for assessment procedures for practical works* 2.2 Tease out the LOs and the LIs from your sample lesson plans as in (2.1).	

	LO: Design and execute projects in Agriculture, Home Economics, Technical Skills and Visual Art
	LI 1.1 Identify a challenge in your immediate environment.
	LI 1.2 Design a suitable solution for the challenge identified in (1.1) above using the ideation process.
	LI 1.3 Exhibit artefacts /completed projects and portfolios in Agriculture, Home Economics, Technical Skills and Visual Art.
	LI 1.4 Organise a jury session to evaluate finished products
	
	2.3 List possible training needs that should be acquired to help deliver the sample lesson successfully,
	Refer to the appendix to the NTS (Rank 1, 2, 3, 4, 5 and 6)
	E.g.
	   a) Portfolio development
	   b) Project facilitation and supervision skills
	   c) Project assessment techniques
	   d) GESI implementation skills
	   e) Techniques in applying ICT in project execution, supervision and assessment
	   f) Organization of exhibition
	   g) Organization of a jury session, etc.
		LO: Design and execute projects in Agriculture, Home Economics, Technical Skills and Visual Art
		LI 1.1 Identify a challenge in your immediate environment, etc.
		
		2.3 List possible training needs that should be acquired to help deliver the sample lesson successfully, Refer to the appendix to the NTS (Rank 1, 2, 3, 4, 5 and 6)
		E.g.
		   Portfolio development, etc.	

| 3 | Teaching, learning and assessment

Reading and discussion of the teaching and learning activities noting, addressing, and explaining areas where teachers may require clarification | 3.1 Guide teachers to identify gaps in their lesson planning and delivery skills (if any) and use their knowledge of training needs to resolve them (NTS 1a, 2c).
E.g.
Possible gaps:
   i. *Deficiency in portfolio development skills*
   ii. *Inadequate project facilitation and supervision skills*
   iii. *Unsuitable project assessment techniques*
   iv. *Poor GESI implementatio n*
   v. *Deficiency in ICT skills application to project execution, supervision and assessment, etc.*
Possible Solution:
*a) **Educate teachers on how to build portfolios either in hard copy or in soft copy and i**dentify the variety of items that can go into a portfolio in TVET such as:*
   i. *Sketches*
   ii. *Finished 2D/3D works*
   iii. *Scrap book*
   iv. *Cut out articles from magazines/ newspapers, etc.*
   v. *Written projects/ assignments*
   vi. *Downloads from the internet*
   vii. *PowerPoint presentations*
   viii. *Photographs/ videos, etc.* | 3.1 identify gaps in your lesson planning and delivery skills (if any) and use your knowledge of training needs to resolve them (NTS 1a, 2c).
E.g.
Possible gaps:
   Deficiency in portfolio writing skills, etc.

Possible Solution:
   ***Educate teachers on how to build portfolios either in hard copy or in soft copy and i**dentify the variety of items that can go into a portfolio in TVET such as:*
   i. *Sketches, etc* | 20 mins |

		viii. Photographs/ videos, etc.	
		Note: Portfolios should not exist only for assessment. They also constitute a private library for the learners' current and future use. Note also that portfolios are a necessary requirement for the scoring of any practical project work.	
	Note: Portfolios should not exist only for assessment. They also constitute a private library for the learners' current and future use. Note also that portfolios are a necessary requirement for the scoring of any practical project work.		
	b) Educate teachers on how to assess practical works. *E.g.* i. *Develop a check list indicating stages of the process* ii. *Identify skill(s) that must be acquired* iii. *Determine scores for each stage depending on the complexity of the skill*	**b) Educate teachers on how to assess practical works** *E.g.* *Develop a check list indicating stages of the process, etc.*	
	3.2 Ask teachers to list the criteria for scoring completed artefact*:* 1. *Evidence of Preliminary/idea development processes* 2. *Appropriate use of tools/material* 3. *Draftmanship/ craftsmanship (Composition-appropriate use of principles and elements of design, Colour and tone, etc. for 2-D works)* 4. *Originality* 5. *Suitability*	3.2 List the criteria for scoring completed artefact 1. *Evidence of Preliminary/idea development processes, etc.*	
	3.3 Ask teachers to review their sample lesson plans to identify skills they will need to promote GESI	3.3 Review your sample lesson plans to identify activities that promote GESI responsiveness (NTS 3f, 3m).	

	E.g. c) *Mixed ability/gender groupings during project execution.* d) *Using positive feedback to learners especially female and SEN students.* 3.4 Ask one teacher to model a teaching activity in the sample lesson in any of the TVET domains taking due cognizance of any of the LOs and LIs of the PLC session. **(EXTENSION ACTIVITY)**	*E.g.* *Mixed ability/gender groupings during project execution* 3.4 Model a teaching activity in the sample lesson in any of the TVET domains taking due cognizance of any of the LOs and LIs of the PLC session. **(EXTENSION ACTIVITY)**	
4. Evaluation and review of session: ▶ **Teachers need to identify critical friends to observe lessons and report at next session** ▶ **Identifying and addressing any outstanding issues relating to the lesson/s for clarification**	4.1 Ask teachers in pairs to share what they have learnt in the session 4.2 Invite the pair to share it with the larger group. 4.3 Ask teachers if there are any further questions for clarification. 4.4 Remind teachers to identify a critical friend to observe them in teaching their lessons in relation to PLC Session 12 and provide feedback to you.	4.1 In pairs, share what you have learnt in this session. 4.2 Share with the larger group 4.3 Ask questions on any issue that need further clarification. 4.4 Identify a critical friend to observe you in teaching your lessons in relation to PLC Session 12 to you.	10 mins

Acknowledgements

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Edmond Dakora	McCoy College of Education, Nadowli		

APPENDIX

HOW TO CHECK CPD POINTS AND TRAINING RECORDS ON TEACHER PORTAL GHANA

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

Click Login on the TPG homepage
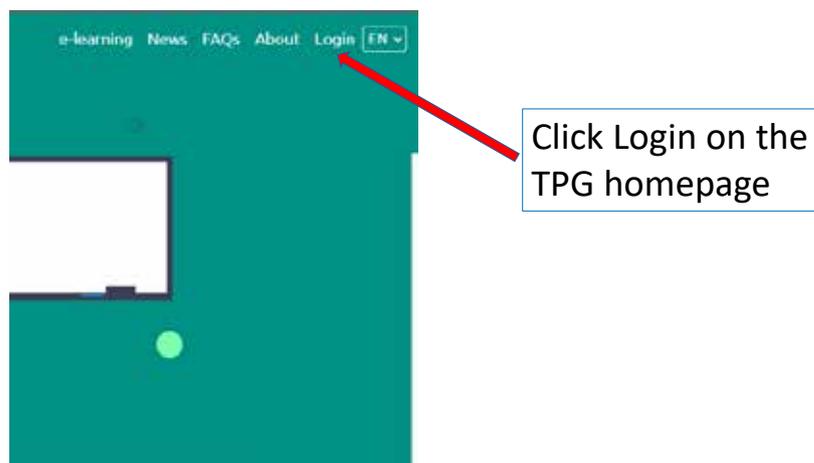
2. On the Login page, click Teacher Login

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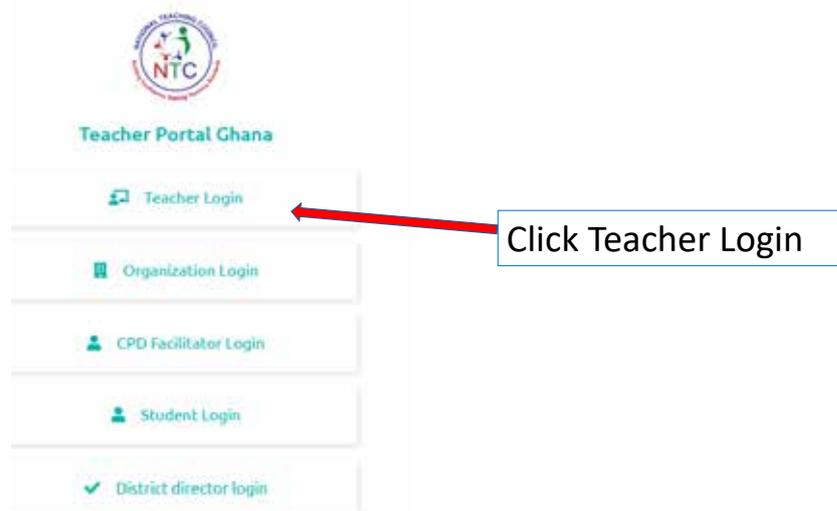
3. On the Teacher Login page enter your email address and password and then click Login

Enter your email address

Enter your password

Check I'm not a robot

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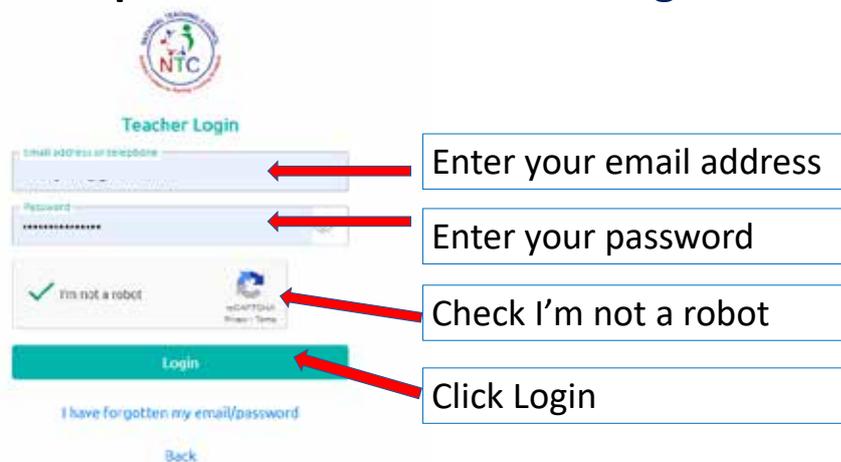
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5. To check CPD points, scroll down to Rank progression. You will see the CPD points progress bar and actual points accrued (Check image below)

CPD points progress bar

CPD points accrued

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

Click to view training records

List of training programs
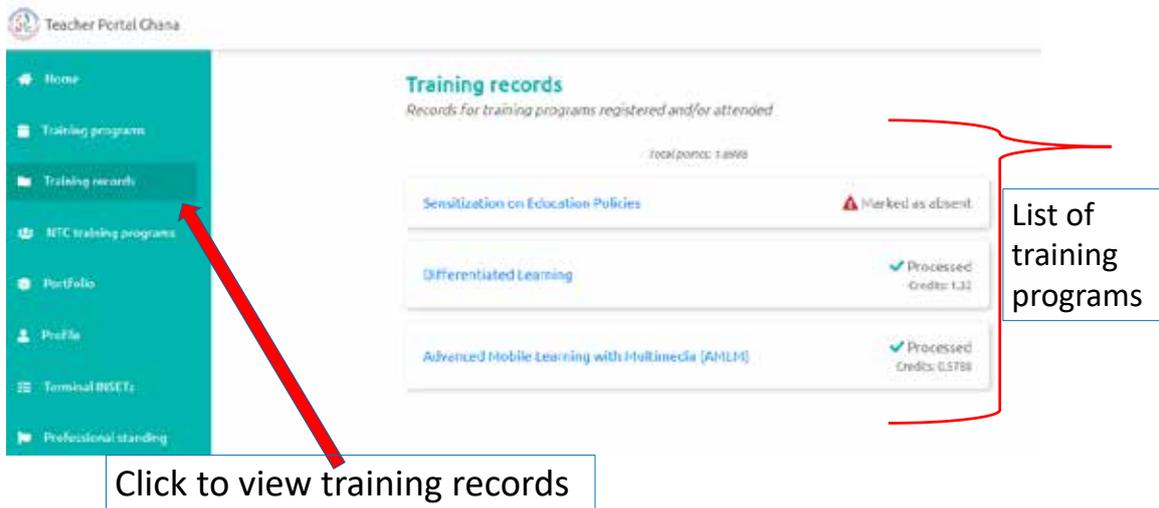
THANK YOU

Gender Equality and Social Inclusion (GESI) Responsive Checklist for Teachers

In line with the National Teaching Council (NTC) priorities on Gender Equality and Social Inclusion (GESI) in education, this checklist seeks to improve all students' (especially girls and students with special education needs, SEN) overall educational attainment, access, participation, and achievement in schools. It draws inspiration from the Gender Handbook for Teaching Practice Mentors (2018) which aims to improve the GESI responsiveness and day-to-day practice of teachers.

The checklist provides guidance on the enhancement of institutional capacities to use GESI responsive curricula, evaluate teaching-learning materials, organize/create gender responsive classroom interaction, and eliminate stereotypes in the teaching and learning process. The toolkit also supports improvement of the teaching methods and learning assessment techniques, managing sexual maturation and creating a safe space to teach and learn in schools.

GESI Responsive Classroom Competencies	Actions/Strategies:
The Teacher uses **GESI responsive pedagogy** in classroom.	1) is conscious and deliberate about GESI responsive pedagogy (teaching and learning processes) and pays attention to the specific learning needs of girls, boys and marginalized groups.
	2) gives equal chance to females and males to ask and answer questions in class (and provides extra encouragement to girls and other students who may lack confidence).
	3) uses adjectives used to characterize both male and female roles and behaviours are positive and interchangeably used; reference male and females as role models, leaders, and historical figures in all learning resources.
	4) uses participatory methods such as group work, debates and role play; and ensures equal participation of females & males (giving extra encouragement where needed).
	5) pays attention to the composition of females and males during group work and assigns females leadership roles

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	6) ensures that females have equal access to teaching and learning resources (TLMs, TLRs, books, desks, etc.), particularly if males are more assertive and take resources first.
	7) does not view Persons with Disability (PWDs) in a negative light, as they are usually identified in TLMs. Often their disability is put before them – for example, deaf man, handicapped child, blind girl etc.
	8) checks to see if both females and males understand the lesson and is patient with females and males who may be shy or afraid to speak.
	9) provides constructive/positive verbal feedback to both females and males in class.
	10) does not use negative expressions or language that demeans, excludes, or gives females the impression that are not as intelligent or do not need to perform as well as males.
	11) does not use harsh/threatening and demeaning language or actions that instil fear in both females and males.
The Teacher uses **GESI responsive language and interaction.**	1) does not say things that reinforce false assumptions about females and males (e.g., girls are bad at maths/science, boys are bad in english language, girls are always shy, boys are the first to answer).
	2) uses of appropriate pronouns (he/she) that represents everyone alternatively in all classroom engagements.
	3) does not use body language that excludes girls or shows preferential treatment to boys (such as speaking mostly to boys or turning your back to girls) and vice versa.
	4) sets ground rules that prohibit teasing or bullying, particularly from males towards females and students with SENs.
	5) builds students' (especially females') skills for self-confidence, assertiveness, speaking out and leadership.
	6) knows the difference between 'being friendly' with girls and being flirtatious. Jokes and conversations should not

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	have sexual undertones, and teachers should not use terms like 'girlfriend' or 'sweetie'.
	7) reduces the use of "man "related phrases. E.g., the use of the words "chairman", "mankind", "freshman", "policeman", "manmade" to gender-neutral nouns or phrases such as "chairperson", "humankind", "first year", "police officer", "person", etc. Teachers must carefully examine their choice and use of such words.
The Teacher uses **GESI responsive TLMs/TLRs.**	1) reviews all textbooks, pictures, posters, materials and resources before using them to see if they reinforce traditional gender roles (male CEOs /decision makers; females in domestic roles etc.)
	2) ensures that stories, case studies, and examples features contributions of women and girls and men and boys and persons with special education needs (SEN).
	3) identifies traditional gender roles that already appear in books/materials and makes a point to alert students to these portrayals and challenges them when using the materials in class.
	4) discusses with students how portrayals of traditional gender roles limit what female students and other minority groups think they can do and achieve in education.
	5) ensures that TLMs/TLRs fairly inclusive of; various learners in the classroom – differently abled/high, average & low proficiency learners. various groups of society – linguistic, economic, tribe, religious, gender, and disabilities.
	6) ensures that books, materials, or equipment are equally distributed amongst females/males and ensures that the needs of students with SEN are met through diverse presentations of content and illustrations.
The Teacher **challenges traditional gender roles** and **other stereotypes.**	1) empowers males to be critical of and challenge traditional views of masculinity (e.g. men should be 'powerful', should not be 'weak', should never cook/clean).

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	2)	empowers females to be critical of and challenge traditional views of about men and women (e.g., women should be dependent on men, should only be mothers/carers, should not be assertive).
	3)	actively uses examples (e.g., exercises, activities, role play, pictures) that challenge or reverse traditional gender roles positively (the best cook in the world in male).
	4)	supports and encourages females to achieve in maths and science and aspire to professions traditionally reserved for men (such as engineering, security, medicine etc.).
	7)	challenges/ensures that persons with disability are not featured or portrayed with negative stereotypes (poor, cursed, beggars, lazy or burden on society).
The Teacher uses **GESI responsive planning.**	1)	ensures that girls and boys sit randomly in the front, middle, and back row of the classroom or based on student's levels of proficiency for support.
	2)	is conscious of learners with physical, visual and auditory needs.
	3)	plans to use teaching strategies that ensure the active participation of all learners.
	4)	ensures that fixtures and visual aids on the walls are accessible to all learners – sends GESI-responsive messages and is in reach of interaction motive and inspire students to learn.
	5)	ensures that the height of shelves and position of tools should be reachable by all users.
	6)	if classroom furniture does not have dignity/chastity panels (*a shield at the front to protect the prevent body exposure*), ensure that female students are comfortably positioned/seated to fully participate in lessons. Stools in the lab/ workshop should be of a good height and size such that all learners can sit comfortably.
	7)	creates an enabling, encouraging classroom where males, females and students with SENs are as

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		interactive and assertive in expressing their views and responses that should be valued.
The Teacher uses **GESI responsive assessment.**	1)	reviews student attendance every 2-3 months (particularly for females) - if there are problems with attendance, the teacher should follow up with the head teacher, guardians/parents.
	2)	reviews student assessments every 2-3 months - if there are large gaps between females and males, the teacher should develop strategies to close the gaps.
	3)	ensures that assessment methods do not disadvantage any marginalized group or individual in the class.
	4)	differentiates lesson delivery and takes account of the learners' levels, interests & learning styles. Be aware of the types of learners – visual, auditory, kinesthetic tactile, reading and writing learners.
	5)	uses a variety of formats to assess (e.g., multiple choice, essay, short answer), papers, group work, practical demonstrations, portfolios, and presentations as options for demonstrating knowledge and understanding.
	6)	encourages two-way constructive feedback – teacher and learner.
The Teacher **deals with sexual maturation in a gender responsive way.**	7)	understands sexual maturation issues for both females and males and provides extra support or counselling to students if needed.
	8)	takes actions to address negative perceptions and interactions (such as ridicule or teasing)
	9)	is sensitive to females needing to use the washrooms or changing rooms more (because they may be uncomfortable to use the toilets during break if shared with boys)
	10)	reviews the state of the school's washrooms and ensures that there are female toilets, that have water and rubbish/hygiene bins and sanitary towels if possible.
	11)	sensitises the school community to manage sexual maturation issues for both females and males, particularly regarding menstruation.

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	12) collaborates with the Guidance & Counselling Coordinator(s) to ensure that the psychosocial and emotional needs of students are met.
The Teacher ensure that the classroom is **a safe learning space**.	1) establishes clear and consistent classroom rules about how learners relate to teacher and each other.
	2) does not permit teasing, name calling and behaviour that is embarrassing, demeaning or disrespects others' opinions.
	3) protect learners from external abuse and intimidation, including sexual harassment, corporal punishment and bullying.
	4) enquires about student's psychosocial and emotional well-being.
	5) understands and explains sexual harassment to students and how it affects the teaching and learning process – what constitutes sexual harassment, including sexual jokes, name calling, touching and caressing, comments about an individual's sexual life or body, demand for sexual favours, the threat of refusal of sexual favours, retaliation etc.
	6) does not make light of sexual harassment cases and do not suggest that any form of sexual harassment was just a joke or make excuses for or defend alleged sexual harassers. Ensures that the act is reported to the appropriate authorities, and it is dealt with.
The Teacher (with the support of the Head teacher) ensure that **school activities are GESI responsive.**	1) school cleaning and chores do not reflect or reinforce traditional gender roles. (e.g., only female students run errands or clean up. Roles and responsibilities is a shared effort (where strengths and weakness are compensated for) and domestic chores are fairly distributed.
	2) females and males have equal opportunities to be both prefects and assistant prefects.
	3) females and males have equal access and opportunities to extra-curricular activities.

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	4) a Guidance Counsellor is in place to provide support and a safe space for all students.
	5) a GESI club is organised to discuss the process of equity to reach the goal of equality where everyone can reach their highest potentials in school and the world of work. helps females and males feel confident to challenge traditional gender roles in the society.
	6) all forms of corporal punishment are banned, and staff are given training in alternative classroom management techniques.
	7) teachers/SMC sensitise parents and community about the need to support education for all, especially girls' education.

References:

FAWE (2011), Increasing Female Primary School Teachers in African Countries: Barriers and Policies, University of Maryland, College Park, MD, USA

GES's Guidelines for Implementing Guidance and Counselling in Pre-tertiary Schools.

https://www.unicef.org/esa/media/6726/file/GRP-A-Toolkit-for-Teachers-and-Schools-2020.pdf

https://ntc.gov.gh/wp-content/uploads/2021/12/NTS.pdf

https://t-tel.org/download/gender-and-social-inclusion-in-teaching-practice-handbook-for-mentors/?wpdmdl=4284&refresh=6438815f196a81681424735&ind=1619828303960&filename=T-TEL-GENDER-HANDBOOK%20FOR%20TEACHING%20PRACTICE%20MENTORS[1].pdf

Mlama et al., (2005), Gender Responsive Pedagogy, pp. 10–11, published by the Forum for African Women Educationalists (FAWE).

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Teacher Lesson Observation Sheet

Region:

District:

Circuit:

School:

Name of Teacher:

Class:

Time:

	Question	Yes	No	In Part	Comment
1.	Is the purpose of the lesson clearly stated in the lesson plan and focused on learners achieving the lesson learning outcomes?				
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.				
3.	Does the teacher maintain a positive and non-threatening learning environment throughout the lesson?				
4.	Are teaching/learning materials and other resources including ICT being used to support learning of all categories of learners?				
5.	Are learners engaged on tasks that challenge them and demonstrate the teacher's high expectation of learner achievement? Does the teacher take into consideration the uniqueness of learners?				

6.	Is there evidence that students are learning?				
7.	Is teaching differentiated to cater for the varied needs of all male learners, female learners, learners with special education needs and those with poor literacy and/ or numeracy proficiency?				
8.	Does the teacher use real life examples which are familiar to learners to explain concepts and their relevance?				
9.	Does the teacher point out or question traditional gender roles when they come up during the lessons as appropriate?				
?	Does the lesson include appropriate interactive and creative approaches e.g., group work, role play, storytelling to support learners achieving the learning outcomes?				
10.	Have cross-cutting issues and /or 21st century skills been integrated in the lesson e.g., problem-solving, critical thinking, communication? If yes, give examples of the issues and skills that have been so integrated.				
11.	Does the teacher incorporate ICT into their practice to support learning?				
12.	Does the teacher encourage learners to ask questions during the lesson?				
13.	Is assessment evident in the lesson? If yes, did it include assessment of, for or as learning and go beyond recall?				

14.	Do learners make use of feedback from teacher and peers?				
15.	Does the teacher evaluate the lesson against the learning outcomes?				

Key strengths in the lesson

Areas for development

Next steps for teacher / STEP

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