# **Tutor Professional Development** Handbook: B.Ed. in Initial **Teacher Education - TVET** Year 3 Semester 2

# HANDBOOK FOR COORDINATORS





and Prudence

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The Government of Ghana







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# Foreword

In Ghana we have made great strides in transforming our teacher education system over the past few years. With each passing year the changes brought about through these reforms are maturing, embedding, and sustaining. Once the first B.Ed. graduates from Colleges of Education enter basic school classrooms from 2022 onwards, I am sure that as a nation, we will truly start to see the benefits of these reforms.

The success of national reforms depends on individual tutors and individual teachers working in classrooms across the country every day. The progress that we want to see will only be brought about through the consistent and regular application of the professional knowledge, professional practice and professional values and attitudes set out in the National Teachers' Standards (NTS).

This is where the Tutor Professional Development Handbooks, written by tutors and university lecturers, have an important role to play in helping tutors to reflect critically on their methods of teaching and learning.

Critical thinking and reflection is an area of weakness in parts of our current education system. Colleges of Education take secondary school graduates and, over four years of the B.Ed., shape them into professional teachers. A recent '21<sup>st</sup> Century Skills assessment' of a representative sample of Ghanaian Senior High School students found that 'critical thinking and problem solving' was the area where they performed least well. Lesson observation of these students' teachers in the same Senior High Schools found that 'employs a variety of instructional strategies that encourage student participation and critical thinking' was the area of the NTS where these teachers consistently scored lowest.

Teaching matters. If we want our Colleges of Education to develop teachers who can think critically and solve problems then tutors must model these expected behaviours in their lessons so that they create an environment where our teachers develop these competencies and, ultimately, use these competencies to develop critical thinking in our basic schools.

This latest set of Professional Development Handbooks, developed by four mentoring universities (University for Development Studies, University of Education, Winneba, University of Ghana and Kwame Nkrumah University of Science and Technology) and tutors from their affiliated Colleges of Education, are the third set of Professional Development Handbooks to be developed since Transforming Teaching, Education & Learning (T-TEL) became a Ghanaian not-for-profit organisation. I would like to take this opportunity to thank both the Ghana Tertiary Education Commission and Mastercard Foundation for making all this possible.

Robin Todd Executive Director, T-TEL February 2022

### Year Three Semester Two

## Writing the weekly PD sessions: Guidance for the Subject Writing Leads (SWL).

- The PD sessions are an important way to ensure effective implementation of the key principles and practices of the B.Ed. *It is critical that what SWL write provides direct subject and B.Ed. specific guidance, so SL/HoD can support and scaffold tutors learning and professional development.*
- The sessions need to provide *the PD* opportunity for tutors fully understand what they need to teach and to planning together to make sure the new B.Ed. courses are taught well
- Developments since the manuals were written require SWL to add additional detail to sessions. Specifically, this means a focus on:
  - Integrating GESI to ensure the needs of females, males and students with special education needs are well catered for
  - Integrating ICT and 21c skills to ensure students learn to use technology effectively to support their own and pupils' learning
  - National Teacher Education Assessment Policy (NTEAP)
    - the three assessment components *for the semester* for EACH course: subject project (30%), subject portfolio (30%) and end of semester examination (40%). These need to be introduced in session 1. PD writers will need to provide an example portfolio and project assessment components if these are not written into the course manuals (See Appendix 2: Course Assessment Components at a Glance).
      - integrating the use of continuous assessment designed to support student teacher learning in each session
- The PD session template provides the frame for SWL to write the guidance for the Subject Leads (SL)/HoD on how to lead and support the professional development of tutors in the weekly sessions for student teachers
- Age level specialisms are introduced in Y2S1. To ensure appropriate subject and age level focus for the PD sessions:
  - there will be subject specialists writing for each subject
  - where subjects are grouped direct reference needs to be made to examples of activities in the course manuals for each subject
  - where there are different age levels direct reference needs to be made to the course manuals for activities for each age level
- STS is six days in year 2 Semester 1 and involves observation and working with small groups subjects should include STS activities
- SL/HoD need to have details of the resources needed for the activities
- Appendix 1: The PD writing checklist, for checking that the PD sessions address all required issues.
- Appendix 2: Course Assessment Components at a Glance, to help ensure the course assessments are accurately introduced

## **Tutor PD Session**

Age Levels/s: JHS Specialism: Career Technology

Name of Subject(s)/Course(s): TVET

### Introduction

TVET in the new B.Ed. curriculum include Agriculture, Home Economics, Technical and Visual Art. The idea that informed the amalgamating all the TVET Courses into one PD manual is the common base that has been established in the new B. Ed curriculum. The B. Ed TVET curriculum has established six (6) key content areas common to all. These include:

Classification	Content
General TVET Knowledge	Terminologies, concepts, theories, historical, philosophical, and sociological foundations, movements, associations and related organizations, policies, misconceptions about TVET
Operating and processing	Nature (identification), proper uses,
Tools, equipment and machines	care/maintenance of tools, equipment and machines
Skills Training Materials and Resources	Sources, characteristics/properties, uses and health, safety and environment (HSE)
Learning Environments: Workshops, studios, and laboratories	types and uses, management practices, safety rules and practices, HSE including Water, Health and sanitation (WASH) related issues
Operations, processes, procedures, and products	Design and realisation/composition, laying out, manufacturing processes and their related HSE, adherence to specifications (to ensure safety of consumers/clients)
Entrepreneurship	key concepts, principles, relevance, business creation, business ethics and social responsibility

What this means is that the component domains (Agriculture, Home Economics, Technical and Visual Art) understand a common language hence can work together. It is important to note that the TVET version of Agriculture is different from the traditional Agricultural Science. It is vocational Agriculture which is expected to be delivered in the Competency Based Training (CBT) mode like all the others.

In this manual, each domain finds expression in the same questions and processes as it relates to their peculiarities. SLs/HoDs should therefore give reasonable room for each domain to find expression most suitable to their peculiar need and expression. *SLs/HoDs must draw attention to course combinations as it relates to each domain. Details are provided in the table below.* 

In Year 3 Semester 2, student teachers are moving into a higher Embedding Teaching phase of the TVET specialism. At this stage, the courses are aimed at exposing student teachers to more practical oriented studio work. In addition, student teachers will be expected to explore and experiment with variety of low cost or no cost tools and materials found in the environment such as colour/pigment, wood, adhesives, vanishes, paper, canvas, recycled metal and other randomly "found" objects (odds and ends). In addition, student teachers will be exposed to relevant ICT software applications such as CorelDraw, Paint, InDesign, Photoshop, AutoCAD, etc. as they go through the design and manufacturing processes as a way of equipping them with employability skills.

The Course combinations are as follows:

- 1. Agriculture Student teachers are to select the only course mounted in Agriculture for 3, credit hour.
- 2. Home Economics Student teachers are to select the only courses mounted in Home Economics for 3 credit hour.
- 3. Technical student teachers are to select all the two (2) courses mounted in Technical for 3 credit hours each, making a total of nine (6) credit hours.
- 4. Visual Arts student teachers are to select one (2) 2-D course mounted for 6 credits hours together with Assessment Practices in Visual Art for 3 credit hours total of nine (9) credit hours.

NB.

- 1. This semester, Assessment Practices in the various Domains constitute the Core Course in all the TVET domains.
- 2. College Principal, Academic Affairs Officers and Time Table planners must also note that Visual Courses; Studio Research in Graphic Design, Picture making and Textile Design are 6 credit hours each and are to be allocated 12 contact hours for practical work on the College Time Table. To be able to have any meaningful work, it would be proper if the 12 hours is continuous. Again, it must be appreciated that the Courses mounted in this semester are serving as a kind of first final. Student teachers are expected to attain their highest skill levels in the options they will select. Their end of Semester Exam will form part of the Year 4 end of Course Exhibition, hence must be taken seriously.

Year 3 Semester 2 TVET Courses Mounted

Agriculture:

1. Assessment Techniques in Agriculture

Home Economics:

1. Assessment Techniques in in Home Economics Technical:

- 1. Assessment Practices in Technical Education
- 2. Entrepreneurship

#### Visual Arts:

- 1. Assessment techniques in Visual Arts
- 2. Studio Practice in Graphic Design
- 3. Studio Practice in Picture Making
- 4. Studio Practice Textiles

## **Tutor PD Session for Lesson 1 in the Course Manual**

Focus: the bullet points provide the frame for what is to be done in the session. The SWL should use the bullets to guide what they write for the SL/HoD and tutors to do and say during each session. Each bullet needs to be addressed and specific reference should be made to the course manual/s.	Guidance notes on Leading the session. What the SL/HoDs will have to say during each stage of the session	Guidance Notes on Tutor Activity during the PD Session. What PD Session participants (Tutors) will do during each stage of the session.	Time in session
<ul> <li>1(a) Introduction to the semester – in session one</li> <li>Introduction to the purpose of the specialisms: EG, UP and COMMON CORE PROGRAMME CURRICULUM (JHS)</li> <li>Overview of subject/s age level/s to be covered in the PD sessions and guidance on grouping tutors according to the subject/s, age levels/s.</li> <li>Introduction to the course manual/s</li> <li>Overview of course learning</li> </ul>	<ul> <li>1.1 Use an ice breaker to open the session</li> <li>Or/and</li> <li>Ask tutors to share their general impression on Year 3 Semester 1 PD sessions and how it helped them to deliver their respective Courses</li> <li>Or/and</li> <li>Ask tutors to review Year 3 Semester 1 courses especially any that may facilitate the study of the new course.</li> <li>NB you may refer to materials used last semester including relevant past question(s) if possible</li> <li>e.g., for Assessment practices a. Discuss three (3)</li> </ul>	<ul> <li>1.1 Listen to and participate/react to the ice breaker to open the session</li> <li>Or/and</li> <li>Share your general impression on Year 3 Semester 1 PD sessions and how it helped you to deliver your respective Courses.</li> <li>Or/and</li> <li>Review the Year 3 Semester 1 courses especially any that is relevant to the new Course.</li> <li>You may refer to a past question if that necessary</li> <li>e.g., for Assessment practices.</li> <li>a. Discuss three (3)</li> </ul>	20 mins

Introduction to	assessment in the	assessment in the
the two	teaching and learning	teaching and learning
continuous	process.	process.
assessment	b. Give relevant	b. Give relevant
components to	classroom examples to	classroom examples to
be undertaken in	support your answer.	support your answer.
each subject	or	or
during the	Design an abstract	Design an abstract
semester (See	mural in not more	mural design for your
Course	than three colours (not	College Library, etc.
Assessment	counting the wall	
Components at a	surface) for your	
Glance Appendix	College Library, etc.	
2) NB in subjects	Or	Or
where there are	Design a package for a	Design a package for
no assessment	local Fresh tomato	a local Fresh tomato
components in	seller in your	seller in your
the course	community, etc.	community, etc.
manuals		
examples will	1.2 Ask tutors to list the	1.2 List the TVET courses
need to be	TVET courses for Year 3	for Year 3 Semester 2 in
provided for	Semester 2 in their	your manual and
SL/HoD.	respective domains and	discuss their peculiar
56/100.	discuss their peculiar	combinations
1(b) Introduction to	combinations if any:	
the session	Agriculture	
	<ul> <li>Assessment</li> </ul>	
<ul> <li>Review prior learning</li> </ul>	Techniques in	
-	Agriculture	
Reading and		
discussion of the	Home Economics	
introductory	<ul> <li>Assessment</li> </ul>	
sections of the	Techniques in	
lesson up to and	Home Economics	
including		
learning	Technical Education	
outcomes and	<ul> <li>Assessment</li> </ul>	
indicators	Techniques in	
Overview of	Technical	
content and	Education	
identification of	Entrepreneurship	
any distinctive	in Technical	
aspects of the	Education.	
lesson/s,		
NB The guidance for	Visual Arts	
SL/HoD should	Assessment	
identify and address	• Assessment Techniques in	
any areas where	Visual Arts	
-	VISUALALIS	

tutors might require clarification on any	<ul> <li>Studio Practice in Graphic Design</li> </ul>		
aspect of the lesson.	<ul> <li>Studio Practice in</li> </ul>		
NB SL/HoD should	Picture Making		
ask tutors to plan for	Studio Practice in		
their teaching as	Textile Design		
they go through the			
PD session	1.3 Ask tutors in their buzz	1.3 In your buzz groupings	
	groupings to read the	read the introductory	
	introductory sections	sections of the course to	
	of the course to	identify and brainstorm	
	identify the Goal(s) for	the purpose, focus, scope, alignment,	
	the learning Area, Key	interrelatedness,	
	contextual factors, Course Description,	relevance, achievability,	
	Core and transferable	etc. of your respective	
	skills, CLO and	courses, e.g. <i>Goal for the</i>	
	Indicators, Cross-	Subject or learning Area,	
	<i>cutting issues,</i> and	Key contextual factors,	
	brainstorm the	Course Description, Core	
	purpose, focus, scope,	and transferable skills.	
	alignment,	Cross-cutting issues, CLO	
	interrelatedness,	and Indicators.	
	relevance,		
	achievability, etc. of		
	their respective		
	courses, <i>e.g.</i>	Agriculture/Home	
	Agriculture/Home Economics, Technical,	Economics, Technical, Visual	
	Visual Art	Art	
	The Course	The Courses on	
	'Assessment Practices',	Assessment Practices, (in	
	is designed to	the various domains) is	
	introduce student	designed to introduce	
	teachers to the	student teachers to the	
	concept of assessment,	concept of assessment,	
	measurement,	measurement,	
	evaluation and testing	evaluation and testing in	
	in education.	education.	
	Student teachers	<ul> <li>Student teachers will be expected to</li> </ul>	
	will be expected to	be expected to demonstrate the skill	
	demonstrate the	of assessing/scoring	
	skill of	all manner of	
	assessing/scoring all manner of	assessable activities	
	assessable	in the classroom	
		including practical	
	activities in the		

ГТ	· · · · · · · · · · · · · · · · · · ·	_	
	classroom	works using various	
	including practical	approaches like check	
	works using	list and observation,	
	various	jury, etc.	
	approaches like		
	check list and		
	observation, jury,		
	etc.		
	Technical	Technical	
	Student teachers will be	Student teachers will	
	expected to draw	be expected to draw	
	business plans, write	business plans, write	
	their CVs, and other	their CVs, and other	
	relevant activities that	relevant activities that	
	relate entrepreneurial	relate entrepreneurial	
	skills, etc.	skills, etc.	
	Visual Arts	Visual Arts	
	Student teachers will be	Student teachers will	
	expected to explore	be expected to explore	
	•		
	more complex	more complex	
	manipulative	manipulative	
	procedures and	procedures and	
	processes in drawing,	processes in drawing,	
	shading, painting,	shading, painting,	
	printing, cutting,	printing, cutting,	
	folding, pasting/gluing,	folding, pasting/gluing,	
	vanishing, framing,	vanishing, framing,	
	trimming, threading,	trimming, threading,	
	knotting, and organising	knotting, and	
	exhibitions, etc. They	organising exhibitions,	
	will also be expected to	etc. They will also be	
	use more advance	-	
		expected to use more	
	materials such as	advance materials such	
	acrylics, oils, pastels,	as acrylics, oils, pastels,	
	conté pencils, charcoal	conté pencils, charcoal	
	pencils, and master the	pencils, and master the	
	safety rules of the	safety rules of the	
	studio, etc.	studio, etc.	
	Refer to the Course	Refer to the Course	
	manuals	manuals	
	1.4 Ask tutors to read	1 4 Road through the	
		1.4 Read through the	
	through the assessment	assessment	
	components suggested	components suggested	
	for the course in the	for the course in your	
	manuals and discuss	manual and discuss	

	their alignment with the NTEAP within the context of 'Embedding Teaching',	their alignment with the NTEAP within the context of 'Embedding Teaching', 1.5 Discuss the following: • At what stage of the lesson should assessment for, as, and of learning be conducted? • What possible forms could they take? • What is the possible relevance of (KWL) i.e. Know already, want to know (learnt) and what is Learnt at the end of the lesson), etc. Refer Appendix 1 and 2 below. Appendix 1 Summary of NTEAP <u>Assessment</u> There are three components of the NTEAP assessment activities to be noted: <u>Component 1</u> : i. Subject Portfolio Assessment t (30% overall Score) Summary of Assessment activities include: • Reports, Selected items of Students' work, Midterm assessment, Reflective Journals, subject Portfolio, etc. Component 2 Project: (30%	
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		1	
	This is also in two parts:	This is also in two parts:	
	i. Projects that do not end	i. Projects that do not end	
	up with a physical	up with a physical	
	product, e.g., surveys. The	product, e.g., surveys. The	
	outcome of such may be	outcome of such may be	
	reports, statistical data,	reports, statistical data,	
	etc.	etc.	
	ii. Projects that involve	ii. Projects that involve	
	hands-on activity with a	hands-on activity with a	
	physical end product such	physical end product such	
	as an artefact, (sculpture,	as an artefact, (sculpture,	
	painting, garment, model	painting, garment, model	
	farm, etc.) These may	farm, etc.) These may need	
	need to be exhibited	to be exhibited Portfolio of	
	Portfolio of preliminary	preliminary	
	drawings/designs,	drawings/designs,	
	artefacts, tools,	artefacts, tools,	
	equipment, materials and	equipment, materials and	
	products and their uses.)	products and their uses.)	
	Component 3: End of	Component 3: End of	
	Semester Examinations-	Semester Examinations-	
	40% overall	40% overall	
	Appendix 2	Appendix 2	
	Building of subject-based	Building of Subject-	
	Portfolios	Portfolios	
	i. Identify the variety of	i. Identify the variety of	
	items that can go into a	items that can go into a	
	_	_	
	TVET portfolio	portfolio in TVET • Sketches	
	<ul> <li>Sketches</li> </ul>		
	• Finished 2D/3D works	• Finished 2D/3D works	
	Scrap book	<ul><li>Finished 2D/3D works</li><li>Scrap book</li></ul>	
		• Finished 2D/3D works	
	Scrap book	<ul><li>Finished 2D/3D works</li><li>Scrap book</li></ul>	
	<ul><li>Scrap book</li><li>Cut-out articles from</li></ul>	<ul><li>Finished 2D/3D works</li><li>Scrap book</li><li>Cut out articles from</li></ul>	
	<ul> <li>Scrap book</li> <li>Cut-out articles from Magazines /</li> </ul>	<ul> <li>Finished 2D/3D works</li> <li>Scrap book</li> <li>Cut out articles from magazines / newspapers,</li> </ul>	
	<ul> <li>Scrap book</li> <li>Cut-out articles from Magazines / newspapers, etc.</li> <li>Written</li> </ul>	<ul> <li>Finished 2D/3D works</li> <li>Scrap book</li> <li>Cut out articles from magazines / newspapers, etc.</li> <li>Written</li> </ul>	
	<ul> <li>Scrap book</li> <li>Cut-out articles from Magazines / newspapers, etc.</li> <li>Written projects/assignments</li> </ul>	<ul> <li>Finished 2D/3D works</li> <li>Scrap book</li> <li>Cut out articles from magazines / newspapers, etc.</li> <li>Written projects/assignments</li> </ul>	
	<ul> <li>Scrap book</li> <li>Cut-out articles from Magazines / newspapers, etc.</li> <li>Written projects/assignments</li> <li>Downloads from the</li> </ul>	<ul> <li>Finished 2D/3D works</li> <li>Scrap book</li> <li>Cut out articles from magazines / newspapers, etc.</li> <li>Written projects/assignments</li> <li>Downloads from the</li> </ul>	
	<ul> <li>Scrap book</li> <li>Cut-out articles from Magazines / newspapers, etc.</li> <li>Written projects/assignments</li> <li>Downloads from the internet</li> </ul>	<ul> <li>Finished 2D/3D works</li> <li>Scrap book</li> <li>Cut out articles from magazines / newspapers, etc.</li> <li>Written projects/assignments</li> <li>Downloads from the internet</li> </ul>	
	<ul> <li>Scrap book</li> <li>Cut-out articles from Magazines / newspapers, etc.</li> <li>Written projects/assignments</li> <li>Downloads from the internet</li> <li>Power point</li> </ul>	<ul> <li>Finished 2D/3D works</li> <li>Scrap book</li> <li>Cut out articles from magazines / newspapers, etc.</li> <li>Written projects/assignments</li> <li>Downloads from the internet</li> <li>Power point</li> </ul>	
	<ul> <li>Scrap book</li> <li>Cut-out articles from Magazines / newspapers, etc.</li> <li>Written projects/assignments</li> <li>Downloads from the internet</li> <li>Power point presentations</li> </ul>	<ul> <li>Finished 2D/3D works</li> <li>Scrap book</li> <li>Cut out articles from magazines / newspapers, etc.</li> <li>Written projects/assignments</li> <li>Downloads from the internet</li> <li>Power point presentations</li> </ul>	
	<ul> <li>Scrap book</li> <li>Cut-out articles from Magazines / newspapers, etc.</li> <li>Written projects/assignments</li> <li>Downloads from the internet</li> <li>Power point presentations</li> <li>Written Reports</li> </ul>	<ul> <li>Finished 2D/3D works</li> <li>Scrap book</li> <li>Cut out articles from magazines / newspapers, etc.</li> <li>Written projects/assignments</li> <li>Downloads from the internet</li> <li>Power point presentations</li> <li>Written Reports</li> </ul>	
	<ul> <li>Scrap book</li> <li>Cut-out articles from Magazines / newspapers, etc.</li> <li>Written projects/assignments</li> <li>Downloads from the internet</li> <li>Power point presentations</li> <li>Written Reports</li> <li>Photographs/videos,</li> </ul>	<ul> <li>Finished 2D/3D works</li> <li>Scrap book</li> <li>Cut out articles from magazines / newspapers, etc.</li> <li>Written projects/assignments</li> <li>Downloads from the internet</li> <li>Power point presentations</li> <li>Written Reports</li> <li>Photographs/videos,</li> </ul>	
	<ul> <li>Scrap book</li> <li>Cut-out articles from Magazines / newspapers, etc.</li> <li>Written projects/assignments</li> <li>Downloads from the internet</li> <li>Power point presentations</li> <li>Written Reports</li> <li>Photographs/videos, etc.</li> </ul>	<ul> <li>Finished 2D/3D works</li> <li>Scrap book</li> <li>Cut out articles from magazines / newspapers, etc.</li> <li>Written projects/assignments</li> <li>Downloads from the internet</li> <li>Power point presentations</li> <li>Written Reports</li> <li>Photographs/videos, etc.</li> </ul>	
	<ul> <li>Scrap book</li> <li>Cut-out articles from Magazines / newspapers, etc.</li> <li>Written projects/assignments</li> <li>Downloads from the internet</li> <li>Power point presentations</li> <li>Written Reports</li> <li>Photographs/videos,</li> </ul>	<ul> <li>Finished 2D/3D works</li> <li>Scrap book</li> <li>Cut out articles from magazines / newspapers, etc.</li> <li>Written projects/assignments</li> <li>Downloads from the internet</li> <li>Power point presentations</li> <li>Written Reports</li> <li>Photographs/videos,</li> </ul>	

Portfolios can be either	Portfolios can be either
soft as in E-Portfolios or	soft as in E-Portfolios or
hard portfolios.	hard portfolios.
iii. Portfolios should not	iii. Portfolios should not
exist only for	exist only for
assessment. They	assessment. They
constitute a private	constitute a private
-	-
library for the learner,	library for the learner,
now and the future	now and the future
iv. For Visual Art, it is a	iv For Visual Art, it is a
necessary requirement	necessary requirement
for the scoring of any	for the scoring of any
practical project work.	practical project work.
1.6 Using reverse	1.6 Point out possible
brainstorming approach	challenges you would
ask Tutor to point out	face in delivering your
possible challenges they	course and use <i>reverse</i>
would face in delivering	brainstorming approach
their respective courses	to discuss how you
and how they intend	intend resolving them
resolving them, e.g.	
Some Visual Art	Some Visual Art
student teachers	student teachers
may have problem	may have problem
with 2-D courses	with 2-D courses
because of drawing	because of drawing
or that their	or that their
interest may be in	interest may be in
3-Ds,	3-Ds,
• Some Colleges may	Some Colleges may
not have the full	not have the full
complement of	complement of
Visual Art teachers	Visual Art teachers
to handle all the 2-	to handle all the 2-
D areas	D areas
satisfactorily	satisfactorily
<ul> <li>Pressure on Visual</li> </ul>	Pressure on Visual
art students	art students
because they will	because they will
be writing their	be writing their
final projects in 2-	final projects in 2-
Ds	Ds
Poor tutor	Poor tutor
knowledge of	knowledge of
assessment	assessment
techniques leading	techniques leading

to inconsistencies	to inconsistencies
and arbitrariness,	and arbitrariness,
Over dependence	Over dependence
on quizzes, end of	on quizzes, end of
semester seat-	semester seat-
down examinations	down examinations
and other non-	and other non-
authentic forms of	authentic forms of
assessment in the	assessment in the
past, etc.	past, etc.
Possible Solutions:	Possible Solutions:
<ul> <li>Putting student</li> </ul>	<ul> <li>Putting student</li> </ul>
teachers in mixed	teachers in mixed
ability groups to	ability groups to
enhance peer	enhance peer
support for weaker	support for weaker
ones.	ones.
<ul> <li>teaching with</li> </ul>	<ul> <li>teaching with</li> </ul>
adequate TLRs	adequate TLRs
<ul> <li>giving all student</li> </ul>	<ul> <li>giving all student</li> </ul>
teachers enough	teachers enough
space and time to	space and time to
develop their skills	develop their skills
adequately	adequately
according to their	according to their
respective pace and	respective pace and
ability	ability
<ul> <li>encourage College</li> </ul>	<ul> <li>encourage College</li> </ul>
authorities to	authorities to
recruit or request	recruit or request
the services of part-	the services of part-
time tutors to	time tutors to
handle courses	handle courses
without permanent	without permanent
tutors.	tutors.
Adopting authentic	Adopting authentic
assessment	assessment
practices such as	practices such as
observation, role	observation, role
play, exhibitions,	play, exhibitions,
demonstrations,	demonstrations,
class jury, self and	class jury, self and
peer assessment,	peer assessment,
etc.	etc.
• SLs and HoDs guide	• SLs and HoDs guide
tutors to develop	tutors to develop
assessment practices such as observation, role play, exhibitions, demonstrations, class jury, self and peer assessment, etc. • SLs and HoDs guide	assessment practices such as observation, role play, exhibitions, demonstrations, class jury, self and peer assessment, etc. • SLs and HoDs guide

 1	
appropriate	appropriate
assessment skills	assessment skills
Educate College	Educate College
Principals and	Principals and
Academic	Academic
Affairs/Exam	Affairs/Exam
Officers,	Officers,
invigilators on how	invigilators on how
to organize and	to organize and
supervise TVET	supervise TVET
practical papers.	practical papers.
etc.	etc.
1.7 Ask tutors to locate any	1.7 Locate any possible
possible linkages	linkages between
between preceding	preceding courses and
courses and the Year 3	the Year 3 Semester 2
Semester 2 Course, and	Course e.g.
discuss how these will	
enhance the teaching	
and learning of the	
current course, e.g.	
Agriculture	Agriculture
Sustainable	Sustainable
Agricultural	Agricultural
Practices	Practices
As against	As against
<ul> <li>As against</li> <li>Assessment</li> </ul>	<ul> <li>Assessment</li> </ul>
Practices in	Practices in
Agriculture, etc.	Agriculture, etc.
Home Economics	Home Economics
Manipulative	Manipulative
Processes and Skills	Processes and Skills
in Home	in Home
Economics,	Economics,
The Four Models	The Four Models
for Home	for Home
Economics	Economics
As against	As against
Assessment	Assessment
Practices in Home	Practices in Home
Economics, etc.	Economics, etc.
Technical	Technical
<ul> <li>Design and</li> </ul>	<ul> <li>Design and</li> </ul>
Realization,	Realization,
Construction	Construction
Technology,	Technology,
ι ε ει ποιοξγ,	

<b></b>	I	
	Electrical Machines, Building Drawing. <i>As against</i> Entrepreneurship in Technical Education	Electrical Machines, Building Drawing. <i>As against</i> Entrepreneurship in Technical Education
	Visual Art The relationship between Assessment Practices in Visual Art As against • Curriculum Studies in Visual Art • Introduction to 2-D As against • Studio Practices in Graphic Design/Picture Making/Textiles Design, etc. Refer to the Course in Year 1, 2 and 3	Visual Art The relationship between Assessment Practices in Visual Art As against • . Curriculum Studies in Visual Art • Introduction to 2-D As against • . Studio Practices in Graphic Design/Picture Making/Textiles Design, etc.
	<ul> <li>1.8 Ask tutors to suggest possible relevant subject base projects for their respective Courses, e.g.</li> <li><u>All the TVET Domains</u> <ul> <li>Write a report of not more than 150 words on how and when to apply assessment of, as and for learning using practical classroom scenarios from your STS.</li> </ul> </li> </ul>	<ul> <li>1.8 Suggest possible relevant subject base projects for your Course Refer to the Course in Year</li> <li>1, 2 and 3</li> <li><u>All the TVET Domains</u></li> <li>Write a report of not more than 150 words on how and when to apply assessment of, as and for learning using practical classroom scenarios from your STS.</li> </ul>
	Technical: • Do a case study on how to inculcate entrepreneurial skills into the	Technical: • Do a case study on how to inculcate entrepreneurial skills into the

training of local	training of local	
apprentice.	apprentice.	
Visual Art:	Visual Art:	
Studio Practice in     Craphic Design:	Studio Practice in     Craphic Design:	
Graphic Design:	Graphic Design:	
Design and Produce	Design and Produce	
a suitable Book	a suitable Book	
Cover for the Visual	Cover for the Visual	
Art Tutor PD	Art Tutor PD	
manual	manual	
Studio Practice in	Studio Practice in	
Picture Making:	Picture Making:	
Design and produce	Design and produce	
a picture based on	a picture based on	
the theme: 'The	the theme: The	
Festival of the	Festival of the	
Chiefs and People':	Chiefs and People:	
Or (The Difference of the Diff	Or The Difference of the Diffe	
• 'The Puberty Rite',	• The Puberty Rite,	
using any Picture	using any of Picture	
Making method, i.e.	Making method, i.e	
a. Painting with	a. Painting with	
(acrylics, oils, pastel,	(acrylics, oils, pastel,	
charcoal, conté,	charcoal, conté,	
water-color), etc.	water-color), etc.	
or b. Collago mothodi	or b. Callaga mathadi	
b. Collage method;	b. Collage method;	
(Collage, Mosaic,	(Collage, Mosaic,	
Photo Montage,	Photo Montage,	
mixed media), etc.	mixed media), etc.	
Studio Practice in	Studio Practice in	
Textiles	Textiles	
<ul> <li>Using a natural abject as a source</li> </ul>	<ul> <li>Using a natural object as a source</li> </ul>	
object as a source	object as a source	
of inspiration,	of inspiration,	
develop an abstract	develop an abstract	
motif. Arrange the	motif. Arrange the	
motif into a	motif into a	
suitable design and	suitable design and	
produced a fabric	produced a fabric	
using any suitable	using any suitable	
manufacturing	manufacturing	
process (printed,	process (printed,	
WOVEN (broad/traditional	WOVEN (broad/traditional	
(broad/traditional	(broad/traditional	

	, , , , , , , , , , , , , , , , , , ,
loom), batik, tie-	loom), batik, tie-
dye, etc.	dye, etc.
NB. These are just	NB. These are just
suggestions and SLO/HoD's	suggestions and SLO/HoD's
together with the tutors	together with the tutors
may develop their own	may develop their own
Subject based curriculum.	Subject based curriculum.
1(b) PD Session 1	1(b) PD Session 1
1.9 Ask tutors to tell how	1.9 Tell how students
students employed the	employed the teaching,
teaching, learning and	learning and
assessments strategies	assessments strategies
they learned in college	they learned in college
during their STS	during their STS
internship in year 3 and	internship in year 3 and
discuss how students	discuss how students
will be prepared to	will be prepared to
employ these strategies	employ these strategies
during their basic school	during their basic school
classroom work in STS	classroom work in STS in
in year 4 semester 1,	year 4 semester 1, e.g.
e.g. the use of mixed	the use of mixed ability
-	-
ability groups, extended	groups, extended
learning, peer and self-	learning, peer and self-
assessment,_ <i>etc.).</i>	assessment, etc.) <u>.</u>
	1 10 Decid the Setue durate my
1.10 Ask tutors to read the	1.10 Read the introductory
introductory sections	sections of lesson 1 in
of lesson 1 in their	your respective subject
respective subject	manuals up to and
manuals up to and	including learning
including learning	outcomes and
outcomes and	indicators and discuss
indicators and discuss	the overview of the
the overview of the	
	content and identify
content and identify	any distinctive aspects
any distinctive aspects	of their lessons, e.g.
of their lessons, e.g.	
All the Domains for	All the Domains for
Assessment Practices	Assessment Practices
Concepts in	Concepts in
Educational	Educational
Assessment	Assessment

	Technical <ul> <li>Assessment <ul> <li>Practices in</li> <li>Technical</li> </ul> </li> <li>Entrepreneurship <ul> <li>Skill in Technical</li> <li>Education</li> </ul> </li> <li>Visual Art <ul> <li>Graphic Design, Picture</li> <li>Making and Textiles</li> <li>Functions of <ul> <li>Museums and</li> <li>Galleries</li> </ul> </li> </ul></li></ul>	<ul> <li>Technical</li> <li>Assessment Practices in Technical</li> <li>Entrepreneurship Skill in Technical Education</li> <li>Visual Art</li> <li>Graphic Design, Picture Making and Textiles</li> <li>Functions of Museums and Galleries</li> </ul>	
<ul> <li>2. Concept         <ul> <li>Development                 (New learning                 likely to arise in                 lesson/s):</li> <li>Identification                 and discussion of                 new learning,                 potential                 barriers to                 learning for                 student teachers                 or students,                 concepts or                 pedagogy being                 introduced in the                 lesson, which                 need to be                 explored with                 the SL/HoD                 NB The guidance for                 SL/HoD should set</li> </ul> </li> </ul>	2.1 Ask tutors to brain- write on sticky paper and use think-pair-share approach to discuss the concept(s) and teaching/learning activities suggested in Lesson 1 within their respective domains, e.g. talk-for-learning methods (discussion, shower-thoughts, think- pair share), demonstration, hands- on activity, group and independent studies as well as e-learning opportunities (OERs and surfing the internet for new knowledge). Refer to the Course Manual	2.1 Brain-write on sticky paper and use think- pair-share approach to discuss the concept(s) and teaching learning activities suggested in Lesson 1 within their respective domains, talk-for-learning methods (discussion, shower-thoughts, think- pair share), demonstration, hands- on activity, group and independent studies as well as e-learning opportunities (OERs and surfing the internet for new knowledge). Refer to your manual	15 mins
out what they need to do to introduce and explain the issues/s with tutors	<ul> <li>2.2 Ask tutors to identify any potential barriers (GESI inclusive) to the teaching and learning of the lesson 1, e.g.</li> <li><i>i. some student teachers</i> may still be apprehensive and stereotyping the concept of assessment and may</li> </ul>	<ul> <li>2.2 Identify any potential barriers to the teaching and learning of the course and suggest ways to resolve them. e.g.</li> <li><i>i. some student teachers may still be apprehensive and stereotyping the concept of assessment and may</i></li> </ul>	

	equate all assessment as		equate all assessment as	
	examination		examination	
	. some student teachers	ii.	some student teachers	
	may also be holding		may also be holding	
	cultural/religious and		cultural/religious and	
	other biases against		other biases against	
	entrepreneurial activities		entrepreneurial activities	
	in certain trades, etc.		in certain trades, etc.	
2.	3 Ask tutors to suggest	2.3	Suggest possible new	
	possible new		approaches to the	
	approaches to the		teaching within domain	
	teaching lesson 1 within		to resolve challenges	
	their domains to resolve		raised in 2.2 above, e.g.	
	challenges raised in 2.2			
	above, e.g.			
i.	undertake a mini	i.	undertake a mini	
	industrial attachment	1.	industrial attachment	
	where student teachers		where student teachers	
	in groups can		in groups can	
	understudy a local		understudy a local	
	master craft-man in the		master craft-man in the	
	community.		community.	
<i>II</i> .	use concept maps to	<i>II</i> .	use concept maps to	
	breakdown tasks to		breakdown tasks to	
	make them easy for all '		make them easy for all	
	learners		learners	
.	invite a local TVET	<i>III</i> .	invite a local TVET	
	entrepreneur (preferably		entrepreneur (preferably	
	one that has defied odds		one that has defied odds	
	and risen above social,		and risen above social,	
	cultural, religious, etc.		cultural, religious, etc.	
	stereotyping in the		stereotyping in the	
	community to interact		community to interact	
	with student teachers.		with student teachers.	
iv.	use pre-recorded video	iv.	use pre-recorded video	
	of Females, people with		of Females, people with	
	SEN, etc. performing		SEN, etc. performing	
	practical TVET activities		practical TVET activities	
	as a way of enhancing		as a way of enhancing	
	their hope if need be.		their hope.	
V.	undertake a minor	v.	undertake a minor	
	community work where		community work where	
	possible to enable		possible to enable	
	student teachers see at		student teachers see at	
	first hand TVET related		first hand TVET related	
	jiist hand i ver related	I		

	Γ	[]	
	activities in the	activities in the	
	community	community	
	vi. use relevant Pre-	vi. use relevant Pre-	
	recorded videos to	recorded videos to	
	illustrate difficult	illustrate difficult	
	concepts and to	concepts and to	
	practicalise the lesson	practicalise the lesson	
	(visit Visual Art Colleges	(visit Visual Art Colleges	
	WhatsApp Platform) and	WhatsApp Platform) and	
	other sources	other sources	
	https://www.youtube.co	https://www.youtube.com/	
	m/watch?v=RrS5Uo66St0	watch?v=RrS5Uo66St0	
	https://www.bbc.co.uk/id	https://www.bbc.co.uk/ide	
	eas/videos/where-did-all.	as/videos/where-did-all.	
	, ,		
	https://www.prod.facebo	https://www.prod.faceboo	
	ok.com/NotableTechnical	k.com/NotableTechnicalWo	
	Women/videos	men/videos	
3. Planning for	3.1 Ask tutors to read and	3.1 Read and discuss the	
teaching,	discuss the teaching and	teaching and learning	
learning and	learning activities	activities suggested in	
assessment	suggested in the	your manual.	
activities for the	manual.		
lesson/s			
<ul> <li>Reading and</li> </ul>	3.2 Guide tutors to list and	3.2 List and discuss how you	
discussion of the	discuss how they would	would facilitate the	
teaching and	facilitate the transfer of	transfer of ICT and 21 <sup>st</sup>	
learning activities	ICT and 21 <sup>st</sup> C. related	C. related skills to your	
<ul> <li>Noting and</li> </ul>	skills to their student	student teachers during	
addressing areas	teachers during the	the teaching and	
where tutors	teaching and learning of	learning of Lesson 1	
may require	Lesson 1 <i>, e.g.</i>		
clarification	collaborative		
	learning through		
Noting	team work, mixed		
opportunities for	sex/ability group		
making links to	work		
the Basic School	<ul> <li>independent</li> </ul>		
Curriculum	<ul> <li>Independent</li> <li>learning through</li> </ul>		
<ul> <li>Noting</li> </ul>	take home		
opportunities for			
integrating: GESI	assignments, library		
responsiveness	research		
and ICT and 21 <sup>st</sup> C	<ul> <li>ICT through the use</li> </ul>		
skills			
21112	of their phones to		
36113	of their phones to surf for information		

				1
•	Reading,	3.3 Ask tutors to identify in	3.3 Within your respective	
	discussion, and	their respective subject	domains identify	
	identification of	domain possible areas	possible areas of	
	continuous	of difficulty envisaged in	difficulty envisaged in	
	assessment	delivering lesson 1	delivering lesson 1	
		effectively, <i>e.g.</i>	effectively	
	opportunities in		enectively	
	the lesson. Each	i. delivering the lesson		
	lesson should	on line (because the		
	include at least	Course was		
	two	designed primarily		
	opportunities to	for face-to-face)		
	use continuous	ii. some tutors may be		
	assessment to	overloaded due to		
	support student	insufficient staff		
	teacher learning	iii. being the beginning		
•	Resources:	of the semester,		
	<ul> <li>links to the</li> </ul>	some students may		
	existing PD	not know the		
	Themes, for	materials they need		
	example,	for lesson 1, so they		
	action	may come to class		
		•		
	research,	unprepared		
	questioning			
	and to other	3.4 Ask tutors to use	3.4 Use <i>reverse</i>	
	external	reverse brainstorming	brainstorming or any	
	reference	or any relevant method	relevant method within	
	material:	within their subject	your subject domain	
	literature, on	domain groups to clarify	groups to clarify	
	web, Utube,	difficulties identified in	difficulties identified in	
	physical	3.2 above. (Refer Notes	3.2 above. (Refer Notes	
		to SLs/HoD below), e.g.	to SLs/HoD	
	resources,			
	power point;	i. using YouTube videos	i. using YouTube videos	
	how they	to illustrate processes	to illustrate processes	
	should be	and procedures	and procedures	
	used.	ii. develop/apply on-	ii. develop/apply on-	
	Consideratio	line interactive	line interactive	
	n needs to	platforms with	platforms with	
	be given to	student teachers	student teachers	
	local	iii. Assigning student	iii. Assigning student	
		teachers to master	teachers to master	
	availability			
	<ul> <li>guidance on</li> </ul>	craftsmen where	craftsmen where	
	any power	possible	possible	
	point	iv. when student	iv. when student	
	presentation	teachers are in	teachers are in	
	, TLR or	residence, take them	residence, take them	
	other	on a mini-community	on a mini-community	
	resources	walk and guide them	walk and guide them	
	resources		wank and guide them	

which need	to locate some	to locate some	
to be developed to support learning • Tutors should be expected to have a plan for the next lesson for student teachers	materials from the community. This will boost their moral and encourage them. v. Tutor can also guide students to fabricate simple tools from scrap materials in the community,	materials from the community. This will boost their moral and encourage them. v. Tutor can also guide students to fabricate simple tools from scrap materials in the community,	
	<ul> <li>3.5 Let tutors surf the Basic Design and Technology curriculum of the JHS and locate the linkages between it and Lesson 1, e.g.</li> <li>cooking, drawing, pattern making, printing, drawing, entrepreneurship,</li> <li>drawing of electronic circuit on card boards and labelling them with the requisite symbols.</li> <li>Using real materials to prepare electrical circuits according to their drawn designs, etc.</li> </ul>	3.5 Surf the Basic Design and Technology curriculum of the JHS and locate the linkages between it and Lesson 1.	
	<ul> <li>3.6 Ask tutors in their buzz groups to discuss how teaching/learning activities adopted in lesson 1 will enhance student teachers during their STS, <i>e.g.</i></li> <li><i>teaching to type or modelling teaching,</i></li> <li><i>role play,</i></li> <li><i>micro-teaching,</i></li> <li><i>The use of Community-walk sessions,</i></li> <li><i>ICT (phones) to surf for information on</i></li> </ul>	<ul> <li>3.6 In your buzz groups discuss how the teaching/learning activities in this lesson will enhance student teaches' STS. <i>e.g.</i></li> <li><i>teaching to type or</i> modelling teaching,</li> <li><i>role play,</i></li> <li><i>micro-teaching,</i></li> <li><i>The use of</i> <i>Community-walk</i> <i>sessions,</i></li> <li><i>ICT (phones) to surf</i> <i>for information on</i></li> </ul>	

the internet in the	the internet in the	
classroom, • group work, etc. will equip student teachers during their STS.	<ul> <li>classroom,</li> <li>group work, etc. will equip student teachers during their STS.</li> </ul>	
<ul> <li>3.7 Ask tutors to brainstorm the continuous assessment opportunities in lesson 1, and show how they will apply assessment <i>for, as and of learning</i> within the context of NTEAP.</li> <li><i>Refer</i> Appendix 1 and 2 above</li> </ul>	3.7 Brainstorm continuous assessment opportunities in lesson 1, and show how you will apply assessment <i>for, as and of learning</i> within the context of NTEAP. <i>Refer Appendix 1 and 2.</i>	
3.8 In their subject domains, ask tutors to list tools and material needed for lesson, e.g. drawing tools (pen, pencils, brushes (sable, bristle) pallet knife, canvas, colours/paint, drawing boards, drawing pins, easel, donkey, and internet facilities, etc.	3.8 List tools and materials needed for lesson 1.	
3.9 Ask tutors to share their lists in 3.8 above to provide opportunities for possible adaptation in other domains. (emphasis should be given to local tools and materials where possible)	3.9 Share your lists in 3.8 above to provide opportunities for possible adaptation in other domains. (emphasis should be given to local tools and materials where possible)	
3.10 Ask tutors to prepare and share draft/plan for lesson 1 with their buzz groups 1 (can be verbal/written on sticky note)	3.10 Share draft/plan for lesson 1 with your buzz group (can be verbal/written on sticky note)	

		Note to SLs/HoD Draw tutors' attention to the fact that they must be deliberate in mentioning and applying assessment <i>for, as and of</i> learning in their lessons to student teachers in class.		
4.	Evaluation and review of session: Tutors need to identify critical	4.1 Ask one or two tutors to sum-up what they learnt in the PD session 1.	4.1 Sum-up what you learnt in the PD session 1	15 mins
•	friends to observe lessons and report at next session. Identifying and addressing any	4.2 Ask tutors to identify a critical friend to observe lessons and report at the next PD session, PD session 2.	4.2 Identify a critical friend to observe lessons and report at the next PD session.	
	outstanding issues relating to the lesson/s for clarification	4.3 Refer any outstanding issues relating to the lesson/s to the SLs/HoDs for clarification.	4.3 Refer any outstanding issues relating to the lesson/s to the SLs/HoDs for clarification.	
		4.4 Remind tutors to read lesson 2 in the Course manuals in readiness for PD session 2	4.4 Remember to read the lesson 2 of your manual before coming for the PD session next week	

## Tutor PD Session for Lesson 2 in the Course Manual

Focus: the bullet points provide the frame for what is to be done in the session. The SWL should use the bullets to guide what they write for the SL/HoD and tutors to do and say during each session. Each bullet needs to be addressed and specific reference should be made to the course manual/s.	Guidance notes on Leading the session. What the SL/HoDs will have to say during each stage of the session	Guidance Notes on Tutor Activity during the PD Session. What PD Session participants (Tutors) will do during each stage of the session.	Time in session
<ol> <li>Introduction to the session</li> <li>Review prior learning</li> <li>A critical friend to share findings for a short</li> </ol>	<ul> <li>1.1. Ask tutors to share how useful PD session</li> <li>1 was and how it influenced their teaching over the week.</li> </ul>	1.1. How useful has the PD session 1 been to you and how did it influenced your teaching over the week.	20 mins
<ul> <li>discussion and lessons learned</li> <li>Reading and discussion of the introductory</li> </ul>	1.2. Ask the critical friend to share his/her observation of the teaching of Lesson 1.	<ul><li>1.2. Share your observation of the teaching of Lesson 1.</li></ul>	
sections of the lesson up to and including learning outcomes and indicators	1.3. Ask tutors to share any success stories or/and challenges as they had in the class during lesson 1.	<ul> <li>1.3. Share any success stories or/and challenges you had in the class during lesson</li> <li>1.</li> </ul>	
<ul> <li>Overview of content and identification of any distinctive aspects of the lesson/s,</li> <li>NB The guidance for SL/HoD should identify and address</li> </ul>	1.4. Ask tutors to tell how they will prepare student teachers to employ relevant teaching, learning and assessment strategies during their STS in year 4 semester 1. (, e.g,modelling by tutor.	1.4. Tell how students will be prepared to employ relevant teaching, learning and assessment strategies during the basic school classroom work in STS n year 4 semester 1.	

any areas where tutors might require clarification on any aspect of the lesson. NB SL/HoD should ask tutors to plan for their teaching as they go through the PD session	1.5. Guide tutors to read the introductory sections of Lesson 2 (up to learning outcomes) and discuss in pairs within their respective domains the important or distinctive aspects of Lesson 2, e.g., the achievability of the Los and Lis Refer to your TVET	<ul> <li>1.5. Read the introductory sections of Lesson 2 (up to learning outcomes) and discuss in pairs the important or distinctive aspects of Lesson 2, e.g. the achievability of the Los and Lis</li> <li>Refer to your respective</li> </ul>	
	<ul> <li>manual.</li> <li>1.6. Ask tutors to read and discuss the overview of the content and identify any distinctive aspects of the lesson(s), e.g. Principles of assessment in schools, purpose of assessment techniques, conceptualization, ideation and the design process with special reference to the various TVET courses? (Refer to the respective TVET manuals).</li> </ul>	<ul> <li>TVET manual.</li> <li>1.6. Read and discuss the Overview of content and identification of any distinctive aspects of the lesson/s, e.g. Principles of assessment in schools, purpose of assessment techniques, conceptualization, ideation and the design process with special reference to the various TVET courses?</li> </ul>	
<ul> <li>2. Concept Development (New learning likely to arise in lesson/s):</li> <li>Identification and discussion of new learning, potential barriers to learning for student teachers or students, concepts or pedagogy being introduced in the lesson, which need to be</li> </ul>	<ul> <li>2.1. Ask tutors to read and discuss the new learning of lesson 2, e.g.</li> <li>Agriculture <ul> <li>Test in education</li> </ul> </li> <li>Home Economics <ul> <li>Role and Purposes of Assessment</li> </ul> </li> <li>Technical <ul> <li>Measurement as Assessment for Technical Education.</li> <li>Attributes and characteristics that</li> </ul> </li> </ul>	2.1. Read and discuss lesson 2.	15 mins

explored with the SL/HoD	lead to a successful entrepreneur	
NB The guidance for SL/HoD should set	Visual Art	
out what they need to do to introduce and explain the issues/s with tutors	<ul> <li>Type of Tests in Education.</li> <li>Studio Practice in Graphic/Picture Making/Textile Design: Greening TVET</li> </ul>	
	2.2. Ask tutors to discuss	2.2. Discuss potential
	potential barriers to	barriers to teaching and
	teaching and learning of	learning of lesson 2,
	lesson 2, <i>e.g.</i>	e.g.
	Some student	• Some student
	teachers may react	teachers may react
	negatively to the	negatively to the
	topic because of the	topic because of the
	misconceptions and	misconceptions and
	over dependence on	over dependence on
	tests as tools for	tests as tools for
	educational	educational
	assessment and the	assessment and the
	abuse associated with	abuse associated
	it over the years has	with it over the
	reduced its usefulness	years has reduced its
	leading to	usefulness leading to
	apprehension when	apprehension when
	the concept is	the concept is
	mentioned.	mentioned.
	Some tutors may	Some tutors may
	have little experience	have little
	or limited	experience or limited
	professional expertise	professional
	to effectively step into	expertise to
	the gab created	effectively step into
	through the abuse of	the gab created
	assessment and avert	through the abuse of
	student teachers'	assessment and
	despair.	avert student
		teachers' despair.

		<ul> <li>Misconceptions about <i>starting</i> an entrepreneurship activity.</li> <li>Greening TVET: the challenge of student teachers accepting/ implementing the concept.</li> </ul>	<ul> <li>Misconceptions about <i>starting</i> an entrepreneurship activity.</li> <li>Greening TVET: the challenge of student teachers accepting/ implementing the concept.</li> </ul>	
•	Planning for teaching, learning and assessment activities for the lesson/s Reading and discussion of the teaching and learning activities.	3.1. Ask tutors to read and discuss the teaching and learning activities in lesson 2, e.g., group discussion, independent study, question-based discussions, group work, field trips, interactive lecture, etc.	3.1. Read and discuss the teaching and learning activities in lesson 2. e.g., group discussion, independent study, question-based discussions, group work, field trips, interactive lecture, etc.	40 mins
•	Noting and addressing areas where tutors may require clarification. Noting opportunities for making links to the Basic School	3.2. Ask tutors to identify and address areas that may require clarification, e.g., how to organise a field trip and Game based learning as way of teaching.	3.2. Ask tutors to identify and address areas that may require clarification, e.g., how to organise a field trips and Game based learning as way of teaching.	
•	Curriculum Noting opportunities for integrating: GESI responsiveness and ICT and 21 <sup>st</sup> C skills Reading, discussion, and identification of continuous assessment opportunities in	<ul> <li>How to organize Field Trips</li> <li>Identify the appropriate site at least one semester ahead</li> <li>Do the preliminary internal and external correspondence. (this arrangement should be tabled latest at the beginning of the semester at the Academic Board</li> </ul>	<ul> <li>How to organize Field Trips</li> <li>Identify the appropriate site at least one semester ahead</li> <li>Do the preliminary internal and external correspondence. (this arrangement should be tabled latest at the beginning of the semester at the Academic Board</li> </ul>	
	the lesson. Each lesson should include at least	meeting and if necessary at the Council Meeting so that	meeting and if necessary at the Council Meeting so that	

two opportunities adequate funding and adequate funding and to use continuous administrative support administrative support assessment to can be obtained. The can be obtained. The support student Tutor should never try Tutor should never try teacher learning to carry sole to carry sole **Resources:** responsibility for a field responsibility for a field 0 links to the trip. Involve all relevant trip. Involve all relevant existing PD College authorities College authorities Themes, for including the Dean of including the Dean of example, Student, HoDs and Student, HoDs and action staff, Domestic Bursar, staff, Domestic Bursar, research, Chief Security, Chief Chief Security, Chief questioning Driver (if it will involve Driver (if it will involve and to other travelling) and the travelling) and the external Principal. Principal. reference Identify Identify material: officer(s)/resource officer(s)/resource literature, on person(s) that will be person(s) that will be web, Utube, the in-house tour the in-house tour guide physical guide at the site. at the site. resources, power point; • Discuss the outline • Discuss the outline of how they of the lesson with the lesson with him/her should be him/her indicating indicating exactly what used. exactly what you you expect your Consideratio students to learn. expect your n needs to students to learn. be given to Prepare your Prepare your students local students (tell them (tell them the kind of availability the kind of preparation they need guidance on 0 preparation they (dressing, materials any power need (dressing, they must carry or not point materials they must carry, tell them the presentation nature of the site and carry or not carry, s, TLR or tell them the nature possible risks in the other of the site and place, what they should resources possible risks in the expect and look out for, which need internal and external place, what they to be should expect and provision made for developed to look out for, support them, time of learning internal and departure to and from Tutors should be external provision the College, etc. expected to have made for them, a plan for the time of departure to next lesson for and from the student teachers College, etc.

Tutor writes a report to the	Tutor writes a report to the	
Academic Board, Principal	Academic Board, Principal	
and Council on the trip, etc.	and Council on the trip, etc.	
3.3. Ask tutors to suggest	3.3. Ask tutors to suggest	
other possible	other possible teaching	
teaching and learning	and learning activities,	
activities, e.g. Cross	e.g. Cross over	
over Teaching, internet	Teaching, internet	
platform (Cloud	platform (Cloud	
Computing, WatsApp,	Computing, WatsApp,	
and Telegram),	and Telegram),	
industrial attachment,	industrial attachment,	
Power Point	Power Point	
Presentation, Game-	Presentation, Game-	
Based Learning etc.	Based Learning etc.	
2.4. Ask tutors to look and	3.4. Look out for links	
3.4. Ask tutors to look out		
for links between	between lesson 2 and	
lesson 2 and the Career	the Career Technology	
Technology curriculum	Curriculum and how	
and how the delivery	the delivery methods	
methods will enhance	will enhance student	
student teachers'	teachers' performance	
performance during	during their STS. e.g.	
their STS, e.g.	the relationship	
the relationship	between tools and	
between tools and	materials, creating	
materials, creating	of graphic design,	
of graphic design,	Picture making and	
Picture making and	Textile design items	
Textile design items	in lesson 2 as in	
in lesson 2 as in	Career Technology	
Career Technology	(Designing and	
(Designing and	making of	
making of	artefacts/products).	
artefacts/products).	The applicability of	
The applicability of	lesson 2 on Test,	
lesson 2 on Test,	types of test, the	
types of test, the	role and purpose of	
role and purpose of	assessment to the	
assessment to the	teaching and	
teaching and	learning of career	
learning of career	technology.	
technology.		

	3.5. Ask tutors to	3.5 Brainstorm possible
	brainstorm possible	3.5. Brainstorm possible responses to GESI, ICT
	responses to GESI, ICT	and 21 <sup>st</sup> C skills issues,
	•	
	and 21 <sup>st</sup> C skills issues,	in lesson 2, e.g.
	in lesson 2, e.g.	
	• Show pre-recorded	Show pre-recorded
	videos of	videos of companies
	companies or/and	or/and persons who
	persons who have	have taken the
	taken the initiate to	initiate to protect and
	protect and sustain	sustain the
	the environment	environment through
	through TVET	their TVET activities
	activities (Greening	(Greening TVET),
	TVET),	Invite resource
	Invite resource	persons who have
	persons who have	demonstrated
	demonstrated	mastery over
	mastery over	gender/SEN
	gender/SEN	stereotyping in the
	stereotyping in the	community, e.g. a
	community, e.g., a	female/person with
	female/person with	SEN who is a
	SEN who is a	statistician or an
	statistician or an	exam officer from
	exam officer from	WAEC.
	WAEC.	<ul> <li>Deliberately creating</li> </ul>
	<ul> <li>Deliberately</li> </ul>	mixed ability
	creating mixed	groupings as way of
	ability groupings as	encouraging all
	way of encouraging	student teachers to
	all student teachers	sharpen their skills to
	to sharpen their	the best of their
	skills to the best of	abilities and also
	their abilities and	benefit from the
	also benefit from	collaborative strength
	the collaborative	of others to promote
	strength of others	collaboration,
	to promote	leadership skills,
	collaboration,	cooperation (i.e. 21 <sup>st</sup>
	leadership skills,	C) etc. among student
	cooperation (i.e.	teachers,
	21 <sup>st</sup> C) etc. among	
	student teachers,	
	Asking student	Asking student
	teachers to use	teachers to use their
	their phones to surf	phones to surf the
<u> </u>	· · · · · ·	· · · · ·

the internet for	internet for new	
new knowledge,	knowledge, such as	
such as	characteristics that	
characteristics that	lead to successful	
lead to successful	entrepreneurship,	
entrepreneurship,	etc.	
3.5. Ask tutors to read,	3.5. Read, identify and	
identify and discus the	discus the continuous	
continuous assessment	assessment	
opportunities in lesson	opportunities in lesson	
2, e.g.	2. e.g.	
refer tutors to the	refer tutors to the	
NTEAP summary in PD	NTEAP summary in PD	
session 1 above and	session 1 above and	
focus their attention on	focus your attention on	
subject portfolio and	subject portfolio and	
subject based projects	subject portions and subject based projects	
considering the	considering the	
following critical issues;	following critical issues;	
-	a) Emphasis should be	
Emphasis should be     placed on bolning		
placed on helping	placed on helping	
student teachers	student teachers to:	
to:	• settle on their project	
• settle on their	topics and designs,	
project topics and	• assemble	
designs,	appropriate tools and	
assemble	materials for the	
appropriate tools	project	
and materials for	<ul> <li>Look for and read</li> </ul>	
the project	literature related to	
• Look for and read	the project, etc.	
literature related to	b) Encouraging	
the project, etc.	creative application	
Encouraging	of knowledge and	
creative application	skills, innovation,	
of knowledge and	teamwork and	
skills, innovation,	relevant application	
teamwork and	of ICT tools and skills	
relevant	both in and out of	
application of ICT	class.	
tools and skills both	c) Student teachers	
in and out of class.	must be assisted at	
Student teachers	this stage to	
• Student teachers must be assisted at	understand the	
	concept and practice	
this stage to	of Greening TVET.	
understand the	oj Greening IVEI.	

	concept and	This will help them	
	practice of	learn to act	
	Greening TVET. This	responsible towards	
	will help them learn	the environment.	
	to act responsible		
	towards the		
	environment.		
	ink the lesson	Link the lesson	
E	Entrepreneurial skills in	Entrepreneurial skills in	
7	Fechnical education to	Technical education to	
S	STRAND 6: (Characteristics	STRAND 6: (Characteristics	
t	hat lead to successful	that lead to successful	
e	entrepreneurship) in Career	entrepreneurship) in Career	
٦	Fechnology curriculum.	Technology curriculum	
	NB. Tutors should be	NB. Tutors should be	
	encouraged to develop	encouraged to develop	
	power point	power point	
	presentation skills and	presentation skills and	
	other TLRs needed to	other TLRs needed to	
	support teaching and	support teaching and	
	provide guidance.	provide guidance.	
	3.6. Guide tutors to identify	3.6. identify TLRs or/and	
	, TLRs or/and other	other resources	
	resources needed to	needed to support the	
	support the learning	learning of lesson 2,	
	of lesson 2, e.g.	e.g.	
	internet facility,	internet facility,	
	library	library	
	laptop/mobile	laptop/mobile	
	phones, charts,	phones, charts,	
	Interactive boards,	Interactive boards,	
	text books,	text books,	
	projectors, smart	projectors, smart	
	boards studio,	boards studio,	
	workshops, physical	workshops, physical	
	environment, and	environment, and	
	,	Sketch pads,	
	Sketch pads,	1 ,	
	NTS/NTECF, NTEAP,	NTS/NTECF, NTEAP,	
	etc.	etc.	
	7 Maka cura ayanyhady	27 Articulato your tooching	
	3.7. Make sure everybody	3.7. Articulate your teaching	
	has a concrete plan for	plans for lessons 2 with	
	teaching for teaching	the whole group.	
	lesson 2.		

4. •	Evaluation and review of session: Tutors should Identifying critical friends to observe lessons	4.1. Ask tutors to invite critical friends from the same or related discipline to observe them as they teach lesson 2 in class and provide feedback.	4.1. Invite critical friends from the same or related discipline to observe them as they teach lesson 2 in class and provide feedback.	15 mins
•	and report at next session. Identifying and addressing any outstanding issues relating to the lesson/s for clarification	<ul> <li>4.2. Ask tutors if there is any issue to be discussed.</li> <li>In the case of any unresolved issues refer to the SWLs</li> </ul>	4.2. Individually, identify any outstanding issues relating to lesson 2 for clarification.	

# Tutor PD Session for Lesson 3 in the Course Manual

Focus: the bullet points provide the frame for what is to be done in the session. The SWL should use the bullets to guide what they write for the SL/Hood and tutors to do and say during each session. Each bullet needs to be addressed and specific reference should be made to the course manual/s.	Guidance notes on Leading the session. What the SL/HoDs will have to say during each stage of the session	Guidance Notes on Tutor Activity during the PD Session. What PD Session participants (Tutors) will do during each stage of the session.	Time in session
<ol> <li>Introduction to the session</li> <li>Review prior learning</li> <li>A critical friend to</li> </ol>	1.1 Ask a tutor to reflect on previous PD Session 2 with the whole group.	1.1 Reflect on the previous PD session with the whole group.	20 mins
<ul> <li>share findings for</li> <li>a short discussion</li> <li>and lessons</li> <li>learned</li> <li>Reading and</li> </ul>	1.2 Allow for short discussion on positive lessons learned from previous PD Session	1.2 Discuss on positive lessons learned from previous PD Session.	
<ul> <li>discussion of the introductory sections of the lesson up to and including learning outcomes and indicators</li> <li>Overview of content and identification of any distinctive aspects of the</li> </ul>	1.3 Ask tutors to tell how they will prepare student teachers to employ the relevant teaching, learning and assessment strategies during the basic school classroom work in STS in year 4 semester 1. ( <i>Collect a few</i> <i>examples for</i> <i>discussion</i> )	1.3 How will you prepare student teachers to employ relevant teaching, learning and assessment strategies during the basic school classroom work in STS in year 4 semester 1.	
lesson/s, NB The guidance for SL/Hood should identify and address any areas where tutors might require	<ul> <li>1.4 Ask tutors to read and discuss introductory sections of the lesson</li> <li>3 including learning outcomes and indicators, e.g.</li> </ul>	<ul> <li>1.4 Read and discuss introductory sections of the lessons including learning outcomes and indicators.</li> <li>e.g.</li> </ul>	

clarification on any	Any relevant RPK of	Any relevant RPK of	
aspect of the lesson.	students? what is the	students? what is the	
NB SL/Hood should	relationship between	relationship between	
ask tutors to plan for	the Los and LIs? etc.	the Los and LIs? etc.	
their teaching as they			
go through the PD	1.5 Ask tutors to	1.5 Identify important or	
session	individually identify	distinctive features of	
	important or	lesson 3; e.g.	
	distinctive features of		
	lesson 3; e.g.		
	<ul> <li>There will be a lot of</li> </ul>	• Thorowill be a lot of	
		• There will be a lot of	
	application of	application of	
	assessment theories	assessment theories	
	across all the	across all the	
	domains because all	domains because all	
	are at various stages	are at various stages	
	of the Assessment	of the Assessment	
	Practices:	Practices:	
	Agriculture:	Agriculture:	
	<ul> <li>Continuous</li> </ul>	Continuous	
	Assessment	Assessment	
	Home <i>Economics</i> :	Home Economics:	
	Common Types of	Common Types of	
	Assessment in the	Assessment in the	
	classroom	classroom	
	Technical:	Technical:	
	<ul> <li>Evaluations of</li> </ul>	<ul> <li>Evaluations of</li> </ul>	
	Assessment for	Assessment for	
	Technical Education	Technical Education	
	<ul> <li>Technical is also is</li> </ul>	<ul> <li>Technical is also is</li> </ul>	
	discussing	discussing	
	advantages and	Entrepreneurship in	
	disadvantages of	Technical Education	
	-	while	
	Entrepreneurship in	while	
	Technical Education		
	while		
	Visual Arts:	Visual Arts:	
	<ul> <li>Is discussing:</li> </ul>	<ul> <li>Is discussing:</li> </ul>	
	- Continuous	- Continuous	
	Assessment as well as	Assessment as well as	
	- Professional Ethics in	- Professional Ethics in all	
	all its 2-D areas,	its 2-D areas, namely	
	namely Graphic	Graphic Design, Picture	
	Design, Picture	Making and Textile	
	Making and Textile	Design	
	-	Design	
	Design		

T			
	<ul> <li>1.6 Ask tutors to brainstorm the prior knowledge of student teachers that will facilitate effective learning of the lesson., e.g.</li> <li>Agriculture students to discuss Test in Agriculture education</li> <li>Home Economic students discussed the Role and Purposes of Assessment</li> <li>Technical Students to discuss measurement as Assessment for Technical Education.</li> <li>Advantages and disadvantages of entrepreneurship</li> <li>Visual Art Students treat Type of Tests in Education and Greening TVET</li> </ul>	<ul> <li>1.6 Brainstorm the prior knowledge of student teachers that will facilitate effective learning of the lesson.</li> <li>e.g. <ul> <li><i>Agriculture</i> students are to discussed Test in education</li> <li><i>Home Economic</i> students to discussed the Role and Purposes of Assessment</li> <li><i>Technical</i> Students to Measurement as Assessment for Technical Education.</li> <li>Entrepreneur ship in Technical</li> </ul> </li> <li>Education, while <ul> <li><i>Visual Art Students</i> treated Type of Tests in Education and</li> <li>Greening TVET</li> </ul> </li> </ul>	
	<ul> <li>1.7 Ask tutors to outline any possible challenging areas in lesson 3 that may require clarification, e.g.</li> <li>Some student teachers may find it difficult to transit from theories into practice</li> <li>Solution</li> <li>Make</li> </ul>	<ul> <li>1.7 Outline any possible challenging areas in lesson that may require clarification, e.g.</li> <li>Some student teachers may find it difficult to transit from theories into practice</li> <li>Solution</li> <li>Make understanding</li> </ul>	
	easy by using concept maps,	easy by using concept maps, simulations, demonstrations, etc. to	

	simulations,	provide a step-by-step	
	demonstrations, etc. to provide a step-by-step approach to concepts and processes	approach to concepts and processes	
<ul> <li>2. Concept Development (New learning likely to arise in lesson/s):</li> <li>Identification and discussion of new learning, potential barriers to learning for student teachers or students, concepts or pedagogy being introduced in the lesson, which need to be explored with the SL/HoD NB The guidance for SL/HoD should set out what they need to do to introduce and explain the issues/s with tutors</li> </ul>	<ul> <li>2.1 Lead tutors to discuss the new concepts in lesson 3, e.g.</li> <li>Fundamental principles of Professional ethics: Integrity, Objectivity, Professional competence and due care, Confidentiality, and Professional behaviour.</li> <li>Characteristics of assessment; Content Validity, Reliability, Fairness, etc.</li> <li>Fabrics printing process, e.g. Cyanotype, Heat printing on ceramics wares, Rotogravure printing, Flexography, Sublimation printing.</li> <li>2.2 Ask tutors to, in their buzz groups to discuss any envisaged misconceptions and potential barriers in teaching and assessing the concepts in lesson 3. e.g. Integrity, Validity, Reliability of assessment, Cyanotype, Rotogravure, Flexography, etc.</li> </ul>	<ul> <li>2.1 Discuss of new concept in lesson 3, e.g.</li> <li>Fundamental principles of Professional ethics: Integrity, Objectivity, Professional competence and due care, Confidentiality, and Professional behaviour.</li> <li>Characteristics of assessment; Content Validity, Reliability, Fairness, etc.</li> <li>Fabrics printing process, e.g Cyanotype, Heat printing on ceramics wares, Rotogravure printing, Flexography, Sublimation printing.</li> <li>2.2 In your buzz groups discuss any envisaged misconceptions and potential barriers in teaching and assessing the concepts in lesson 3.</li> <li>e.g. Integrity, Validity, Reliability of assessment, Cyanotype, Rotogravure, Flexography, etc.</li> </ul>	15 mins

		Solution	Solution	
		Surf the internet for	Surf the internet for further	
		further information and	information and share with	
		share with the buzz group	the buzz group	
		share with the bazz group	the buzz group	
3.	Planning for	3.1 Ask tutors to read and	3.1 Read and discuss the	40 mins
	teaching, learning	discuss the teaching	teaching and learning	
	and assessment	/learning activities	activities prescribed in	
	activities for the	prescribed in the	the manual in respective	
	lesson/s	manual in respective	for lesson 3, e.g.	
•	Reading and	for lesson 3, e.g.		
	discussion of the	face to face, internet	face to face, internet	
	teaching and	search, work-based	search, work-based	
	learning activities	learning, group work,	learning, group work,	
•	Noting and	plenary discussion,	plenary discussion,	
	addressing areas	demonstration, simulation,	demonstration, simulation,	
	where tutors may	brainstorming as well as	brainstorming as well as	
	require	think-pair-and share.	think-pair-and share.	
	clarification			
•	Noting	3.2 Lead tutors to point out	3.2 Point out and discuss	
	opportunities for	areas that may require	the areas that require	
	making links to the	clarifications, e.g.	clarification, e.g.	
	Basic School	Face-to-face- even	Face-to-face- even	
	Curriculum	though the manual	though the manual	
•	Noting	prescribed face-to-face	prescribed face-to-face	
	opportunities for	approach the lesson	approach the lesson can	
	integrating: GESI	can be delivered	be delivered virtually	
	responsiveness	virtually since student	since student teachers	
	and ICT and 21 <sup>st</sup> C	teachers may not be	may not be back to	
	skills	back to campus	campus	
•	Reading,	Simulation- may	Simulation- may	
	discussion, and	require a smartboard	require a smartboard	
	identification of	and other internet	and other internet	
	continuous	facilities which may	facilities which may not	
	assessment	not be available in the	be available in the	
	opportunities in	Colleges or may be	Colleges or may be non-	
	the lesson. Each	non-functional due to	functional due to poor	
	lesson should	poor internet service in	internet service in some	
	include at least	some areas where the	areas where the lesson	
	two opportunities	lesson may be	is being delivered from	
	to use continuous	delivered from or to as	or to as the case may	
	assessment to	the case may be.	be.	
	support student	Solution- <i>Lesson can</i>	Solution- <i>Lesson can be</i>	
	teacher learning	be pre-recorded and	pre-recorded and	
•	Resources:	student teachers can	student teachers can	
	$\circ$ links to the	play back at their	play back at their	
	existing PD	convenience	convenience	

Themes, for	Learners with SEN-	Learners with SEN-	
example, action	some student teachers	some student teachers	
research,	with SEN may miss-out	with SEN may miss-out	
questioning and	if virtual lessons are not	if virtual lessons are not	
to other	well thought through.	well thought through.	
external	Solution: critical,	Solution: critical,	
reference	thinking, consultations	thinking, consultations	
material:	and advance	and advance	
literature, on	preparation is needed	preparation is needed	
web, Utube,	to take care of all	to take care of all	
physical	learners irrespective of	learners irrespective of	
resources,	their ability or	their ability or location,	
power point;	location, etc.	etc.	
how they	3.3 Ask tutors to use think-	2.2 Lleo think pair chara to	
should be used.		3.3 Use think-pair-share to	
Consideration	pair-share approach to	discuss assessment	
needs to be	discuss assessment	opportunities in the	
given to local	opportunities in the	lesson and how they	
availability	lesson and how they	will be used to support	
<ul> <li>guidance on</li> </ul>	will use these to	student teachers to	
any power	support student	assess learners in	
point	teachers to assess	Career Technology	
presentations,	learners in Career	lesson during their STS	
TLM or other	Technology lesson	sessions, e.g.	
resources which	during their STS		
need to be	sessions, e.g.		
developed to	Report writing on internet	Report writing on internet	
support	search, quizzes, projects,	search, quizzes, projects,	
learning	portfolios, exhibitions,	portfolios, exhibitions,	
• Tutors should be	Peer and self-assessment,	Peer and self-assessment,	
expected to have a	etc.	etc.	
plan for the next	- Tutor uses assessment	- Tutor uses assessment	
lesson for student	for and as learning	for and as learning	
teachers	effectively in the	effectively in the	
	classroom	classroom	
	- Score and give feedback	- Score and give feedback	
	for quizzes given to	for quizzes given to	
	student teachers on time	student teachers on time	
	- Refer student teachers	- Refer student teachers	
	to the NTEAP summary	to the NTEAP summary	
	as it in PD Session 1	as it in PD Session 1	
	- Guide student teachers	- Guide student teachers	
	to build their portfolio	to build their portfolio	
	- Provide regular guidance	- Provide regular	
	and feedback for	guidance and feedback	
	students on the project	for students on the	
	works	project works	
L			

- Allow each student	- Allow each student	
learner to progress at	learner to progress at	
their own pace	their own pace	
- Encourage student	- Encourage student	
teachers to interact and	teachers to interact and	
share ideas freely	share ideas freely among	
among themselves so	themselves so that the	
that the weaker ones	weaker ones can receive	
can receive peer support	peer support	
- Use self and peer-	- Use self and peer-	
assessment to inspire	assessment to inspire	
confidence in student	confidence in student	
teachers especially the	teachers especially the	
slow learners (SEN) and	slow learners (SEN) and	
the vulnerable,	the vulnerable,	
- Encourage regular jury	- Encourage regular jury	
sessions through mini	sessions through mini	
class exhibitions.	class exhibitions.	
- Use positive remarks to	- Use positive remarks to	
motive student teachers	motive student teachers	
especially the slow	especially the slow	
learners (SEN) and the	learners (SEN) and the	
vulnerable, etc.	vulnerable, etc.	
3.4 Ask tutors to discuss	3.4 Discuss how the	
how the adoption of	adoption of <i>Ipsative</i>	
Ipsative assessments	assessments within the	
within the Continuous	Continuous Assessment	
Assessment provisions in lesson 3 will	provision in lesson 3 will increase the sense	
in lesson 3 will		
the second se		
increase the sense of	of security and	
security and	of security and inclusiveness among	
security and inclusiveness among	of security and inclusiveness among vulnerable student	
security and inclusiveness among vulnerable student	of security and inclusiveness among	
security and inclusiveness among	of security and inclusiveness among vulnerable student	
security and inclusiveness among vulnerable student	of security and inclusiveness among vulnerable student	
security and inclusiveness among vulnerable student teachers, e.g.	of security and inclusiveness among vulnerable student teachers, e.g.	
<ul> <li>security and</li> <li>inclusiveness among</li> <li>vulnerable student</li> <li>teachers, e.g.</li> <li>Continuous assessment</li> </ul>	of security and inclusiveness among vulnerable student teachers, e.g. • Continuous assessment	
<ul> <li>security and inclusiveness among vulnerable student teachers, e.g.</li> <li>Continuous assessment provides student</li> </ul>	<ul> <li>of security and inclusiveness among vulnerable student teachers, e.g.</li> <li>Continuous assessment provides student</li> </ul>	
<ul> <li>security and inclusiveness among vulnerable student teachers, e.g.</li> <li>Continuous assessment provides student teachers the opportunities to prove</li> </ul>	<ul> <li>of security and inclusiveness among vulnerable student teachers, e.g.</li> <li>Continuous assessment provides student teachers the opportunities to prove</li> </ul>	
<ul> <li>security and inclusiveness among vulnerable student teachers, e.g.</li> <li>Continuous assessment provides student teachers the opportunities to prove their mastery of</li> </ul>	<ul> <li>of security and inclusiveness among vulnerable student teachers, e.g.</li> <li>Continuous assessment provides student teachers the opportunities to prove their mastery of</li> </ul>	
<ul> <li>security and inclusiveness among vulnerable student teachers, e.g.</li> <li>Continuous assessment provides student teachers the opportunities to prove their mastery of materials, tools,</li> </ul>	<ul> <li>of security and inclusiveness among vulnerable student teachers, e.g.</li> <li>Continuous assessment provides student teachers the opportunities to prove their mastery of materials, tools,</li> </ul>	
<ul> <li>security and inclusiveness among vulnerable student teachers, e.g.</li> <li>Continuous assessment provides student teachers the opportunities to prove their mastery of materials, tools, procedures and</li> </ul>	<ul> <li>of security and inclusiveness among vulnerable student teachers, e.g.</li> <li>Continuous assessment provides student teachers the opportunities to prove their mastery of materials, tools, procedures and</li> </ul>	
<ul> <li>security and inclusiveness among vulnerable student teachers, e.g.</li> <li>Continuous assessment provides student teachers the opportunities to prove their mastery of materials, tools, procedures and processes in a more</li> </ul>	<ul> <li>of security and inclusiveness among vulnerable student teachers, e.g.</li> <li>Continuous assessment provides student teachers the opportunities to prove their mastery of materials, tools, procedures and processes in a more</li> </ul>	
<ul> <li>security and inclusiveness among vulnerable student teachers, e.g.</li> <li>Continuous assessment provides student teachers the opportunities to prove their mastery of materials, tools, procedures and processes in a more relaxed atmosphere</li> </ul>	<ul> <li>of security and inclusiveness among vulnerable student teachers, e.g.</li> <li>Continuous assessment provides student teachers the opportunities to prove their mastery of materials, tools, procedures and processes in a more relaxed atmosphere</li> </ul>	
<ul> <li>security and inclusiveness among vulnerable student teachers, e.g.</li> <li>Continuous assessment provides student teachers the opportunities to prove their mastery of materials, tools, procedures and processes in a more relaxed atmosphere devoid of formal</li> </ul>	of security and inclusiveness among vulnerable student teachers, e.g. • Continuous assessment provides student teachers the opportunities to prove their mastery of materials, tools, procedures and processes in a more relaxed atmosphere devoid of formal	
<ul> <li>security and inclusiveness among vulnerable student teachers, e.g.</li> <li>Continuous assessment provides student teachers the opportunities to prove their mastery of materials, tools, procedures and processes in a more relaxed atmosphere</li> </ul>	<ul> <li>of security and inclusiveness among vulnerable student teachers, e.g.</li> <li>Continuous assessment provides student teachers the opportunities to prove their mastery of materials, tools, procedures and processes in a more relaxed atmosphere</li> </ul>	

NB	NB	
Ipsative assessments	Ipsative assessments	
(also known as force-	(also known as force-	
choice testing) is a	choice testing) is a	
practice of determining	practice of determining	
a student's progress	a student's progress	
based on their earlier	based on their earlier	
work. It measures or	work. It measures or	
tracks the progress of	tracks the progress of	
the individuals by	the individuals by	
comparing their	comparing their	
performance, or scores,	performance, or scores,	
against their own	against their own	
previous performances	previous performances	
or scores. It provides a	or scores. It provides a	
basis for students to	basis for students to	
take pride in their	take pride in their	
accomplishments and	accomplishments and	
improves retention	improves retention	
when a student is	when a student is tested	
tested multiple times,	multiple times, instead	
instead of just one time	of just one time with the	
with the same	same examination	
examination material.	material.	
3.5 Guide tutors to model	3.5 Model or role play	
(role play) how they	how you will use	
can use assessment as	assessment as	
<i>learning</i> in a practical	<i>learning</i> in a practical	
lesson,	lesson	
e.g., jury session	e.g., jury session	
3.6 Ask tutors locate the	3.6 In your buzz groups	
ICT and 21 <sup>st</sup> C skill	locate the ICT and 21 <sup>st</sup> C	
provisions in the	skill provisions in the	
manual and in their	manual and use think-	
buzz groups use think-	pair-share approach to	
pair-share approach to	discuss how they can	
discuss how they can	be facilitated within	
be facilitated within	your lesson 3.	
lesson 3.		
e.g.	e.g.	
• Use an appropriate	Use an appropriate ICT	
ICT tool such as,	tool such as	
CorelDraw, paint,	CorelDraw, paint,	
AutoCAD, Google,	AutoCAD, Google,	

_	
<ul> <li>Form as an assessment tool etc.</li> <li>Conduction of inquirybased research into skills acquisition of both male and female practical activities.</li> <li>Use PowerPoint to teach the processes of creating designs to be printed onto fabrics.</li> <li>3.7 Lead tutors to point out GESI issues in the</li> </ul>	<ul> <li>Form as an assessment tool etc.</li> <li>Conduction of inquiry- based research into skills acquisition of both male and female practical activities.</li> <li>Use PowerPoint to teach the processes of creating designs to be printed onto fabrics.</li> <li>3.7 Put in place GESI responsiveness issues</li> </ul>
<ul> <li>manual and to put in place appropriate responsive strategies for the lesson. e.g.</li> <li>Ensure that no student teacher dominates, side-line or discriminate against the less assertive ones.</li> </ul>	<ul> <li>in relation to the lesson, e.g.</li> <li>Ensure that no student teacher dominates, side-line or discriminate against the less</li> </ul>
<ul> <li>Make adequate time for feedback from student teachers with special educational needs and other vulnerable students including females (where applicable) to ensure that all student teachers participate and benefit equally from the lesson.</li> <li>Reviews assessment procedure to identify if there are large gaps between endowed and less endowed student teachers.</li> </ul>	<ul> <li>assertive ones.</li> <li>Make adequate time for feedback from student teachers with special educational needs and other vulnerable students including females (where applicable) to ensure that all student teachers participate and benefit equally from the lesson.</li> <li>Reviews assessment procedure if there are large gaps between endowed and less endowed student teachers.</li> </ul>
3.8 Ask tutors to list the needed resources for the teaching and learning of the concepts in lesson 3.	3.8 List the needed resources for teaching and learning of the concepts in lesson 3.

		<i>e.g.</i> Braille, Scanner and Embosser Sign language, YouTube, Design studio, Internet facility, laptop/ computer/PCs, JHS Career Technology curriculum.		
4. •	<b>Evaluation and</b> <b>review of session:</b> Tutors should Identifying critical friends to observe lessons and report at next session.	4.1 Let tutors suggest names of critical friends to they want to observe their lesson and report to the next PD session.	4.1 Name a critical friend to observe your lesson and report the outcome at next PD session.	15 mins
•	Identifying and addressing any outstanding issues relating to the lesson/s for clarification	<ul> <li>4.2 Ask tutors to point out any outstanding issues relating to lesson 3 that need clarification.</li> <li>4.3 Ask tutors to read the course manuals in preparation for PD session 4.</li> </ul>	<ul> <li>4.2 Mention any outstanding issues in lesson 3 that needs clarification.</li> <li>4.3 Read the course manuals in preparation for PD session 4.</li> </ul>	

# Tutor PD Session for Lesson 4 in the Course Manual

Focus: the bullet points provide the frame for what is to be done in the session. The SWL should use the bullets to guide what they write for the SL/HoD and tutors to do and say during each session. Each bullet needs to be addressed and specific reference should be made to the course manual/s.	Guidance notes on Leading the session. What the SL/HoDs will have to say during each stage of the session	Guidance Notes on Tutor Activity during the PD Session. What PD Session participants (Tutors) will do during each stage of the session.	Time in session
<ol> <li>Introduction to the session</li> <li>Review prior learning</li> <li>A critical friend to share findings for a short discussion and lessons learned</li> <li>Reading and discussion of the introductory</li> </ol>	<ul> <li>1.1 Ask tutors to reflect on previous PD Session (3) and share with the whole group how it influenced their lesson.</li> <li>1.2 In the whole groups ask the critical friend (subject specialist) to report on his/her observation of the teaching of Lesson 3.</li> </ul>	<ul> <li>1.1 Reflect and share how PD session (3) influenced your teaching over the week.</li> <li>1.2 Report your observation on the teaching of Lesson 3</li> </ul>	20 mins
<ul> <li>sections of the lesson up to and including learning outcomes and indicators</li> <li>Overview of content and identification of any distinctive aspects of the lesson/s,</li> <li>NB The guidance for SL/HoD should identify and address any areas where</li> </ul>	<ul> <li>1.3 Ask tutors to discuss how they will prepare student teachers to employ relevant teaching, learning and assessment strategies during the basic school classroom work in STS in year 4 semester 1. (<i>Collect a few examples for discussion</i>), e.g.</li> <li>Tutor modeling.</li> </ul>	1.3 Tell how students will be prepared to employ relevant teaching, learning and assessment strategies during the basic school classroom work in STS in year 4 semester 1.	

tutors might require clarification on any aspect of the lesson. NB SL/HoD should ask tutors to plan for their teaching as they go through the PD session	<ul> <li>1.4 Ask participants to read the introductory sections of Lesson 4 (that is learning outcomes and indicators) and discuss in their buzz groups the important or distinctive aspects of the lesson, e.g.</li> <li>a. the various types of test</li> <li>b. the characteristics of each type of test.</li> <li>c. principles of design d. Ideation and conceptualization in basic designing, Technical Skills Entrepreneurship</li> </ul>	<ul> <li>1.4 Read the introductory sections of Lesson 4 (example; learning outcomes and indicators) and discuss in their buzz groups the important or distinctive aspects of the lesson, e.g.</li> <li>a. the various types of test</li> <li>b. the characteristics of each type of test.</li> <li>c. principles of design</li> <li>d. Ideation and conceptualization in basic designing, Technical Skills Entrepreneurship.</li> </ul>
	Refer to your respective TVET course manuals.	<i>Refer to your respective TVET course manuals.</i>
	<ul> <li>1.4 Ask tutors to read the Overview of the content of lesson 4 and identify any distinctive concepts of the lesson, e.g.</li> <li><i>Principles of</i></li> </ul>	<ul> <li>1.4 Read the Overview of the content of lesson 4 and identify any distinctive aspects of the lesson.</li> <li>Principles of assassment in</li> </ul>
	assessment in schools, purpose of assessment techniques, conceptualization, • ideation and the design process with special reference to the various TVET courses?	assessment in schools, purpose of assessment techniques, conceptualization, • ideation and the design process with special reference to the various TVET courses?
	1.5 Ask tutors to identify and address any area in lesson 4 that needs clarification.	1.5 Identify and address any area in lesson 4 in your respective TVET domains that needs clarification.

			1
	For example: the lack	For example: Lack of	
	of Uniform procedure	Uniform procedure in	
	in assessing practical	assessing practical or	
	or project work in TVET	project work in TVET	
	courses in Colleges of	courses in Colleges of	
	education?	education?	
	Possible solution;	Possible solution;	
	Workshops/in-service	Workshops/in-service	
	training should be	training should be	
	organized for tutors	organized for tutors and	
	and student teachers in	student teachers in	
	assessing practical	assessing practical work.	
	work. Also, a general	Also, a general platform	
	platform be created for	be created for	
	tutors/student tutor to	tutors/student tutor to	
	share current ideas on	share current ideas on	
	assessment.	assessment.	
2. Concent	2.1. A ale to the are the stack	2.1. Identify and discuss the	15
2. Concept	2.1 Ask tutors in their buzz	2.1 Identify and discuss the	15 mins
Development	groups to identify and	new learning ideas or	
(New learning	discuss new learning	concept in your various	
likely to arise in	/concepts in lesson 4	TVET lesson courses.	
lesson/s):	in your TVET domains		
<ul> <li>Identification and</li> </ul>	e.g.		
discussion of new			
learning, potential	Agriculture		
barriers to learning			
for student	<ul> <li>General principles of</li> </ul>		
teachers or	school based		
students, concepts	assessment		
or pedagogy being			
introduced in the	Home Economics		
lesson, which need	Continuous Assessment		
to be explored			
with the SL/HoD	Technical		
NB The guidance for	Purposes of Assessment		
SL/HoD should set	Techniques for		
out what they need	Technical Education		
to do to introduce			
	Viewel Art		
and explain the	Visual Art		
issues/s with tutors	Types of Test items		
	(Essay, objective		
	/Multiple-choice and		
	True or False		
	Objective Test,		
	Matching Test and		

Supply Type) Practical Test)	
<ul> <li>The Concept of Basic Design: Conceptualization, Ideation and the Design Process</li> </ul>	
2.2 Guide tutors to identify and discuss potential barriers to the teaching and learning of lesson 4 with the whole group.	2.2 Discuss potential barriers to the learning of lesson 4 for student teachers or students.
For example: Agriculture Gender and inclusivity issues in group formation and group work	For example: Agriculture Gender and inclusivity issues in group formation and group work
<ul> <li>Home economics</li> <li>Some Student teachers have poor attitude towards activity-based learning</li> <li>Some classes are also very large and make scoring of assignments difficult</li> <li>Some student teachers may have biases regarding Continuous assessment due to the arbitrary, subjective, and sometimes vindictive use of CA marks in the past</li> </ul>	<ul> <li>Home economics</li> <li>Students' attitude towards activity-based learning and also large class size</li> <li>Some classes are also very large and make scoring of assignments difficult</li> <li>Some student teachers may have biases regarding Continuous assessment due to the arbitrary, subjective, and sometimes vindictive use of CA marks in the past</li> </ul>
<ul> <li>Visual art</li> <li>Some student teachers may find it difficult to conceptualize issues that could be translated into art forms.</li> </ul>	<ul> <li>Visual art</li> <li>Many people find it virtually difficult to conceptualize issues that could be translated into art forms.</li> </ul>

	<ul> <li>Technical</li> <li>Some technical tutors has little desire to assess practical work of student teachers. It is noted that few teaches wish to assess practical work (Gallo, 2006).</li> <li>Lack of expertise on the subject of the assessment.</li> <li>Fear of the assessment by student teachers.</li> </ul>	<ul> <li>Technical</li> <li>Less desire to assess practical work by tutors. It is noted that few teaches wish to assess practical work (Gallo, 2006). No one knows exactly what to assess.</li> <li>Lack of expertise on the subject of the assessment.</li> <li>Fear of the assessment by student teachers or students.</li> </ul>	
<ul> <li>3. Planning for teaching, learning and assessment activities for the lesson/s</li> <li>Reading and discussion of the teaching and learning activities</li> <li>Noting and addressing areas where tutors may require clarification</li> <li>Noting opportunities for making links to the Basic School Curriculum</li> <li>Noting opportunities for integrating: GESI responsiveness and ICT and 21<sup>st</sup> C skills</li> <li>Reading, discussion, and</li> </ul>	<ul> <li>3.1 Ask tutors to read and discuss the teaching and learning activities in lesson 4 in the various TVET domains.</li> <li>e.g.</li> <li>Tutor uses interactive lecture to present the forms of assessment.</li> <li>Use shower thought to discuss the concept of ideation and conceptualization and how they can be applied in idea development for the production of pictorial forms.</li> <li>Documentation and concept of ideation and how they can be applied in idea development for the production of the concept of ideation and how they can be applied in idea development for the production of the concept of ideation and how they can be applied in idea development for the production of the concept of ideation and how they can be applied in idea development for the production of pictorial forms (NTECF p 21; NTS 13)</li> </ul>	<ul> <li>in idea development for the production of pictorial forms.</li> <li>Documentation and presentation of the concept of ideation and conceptualization and</li> </ul>	40 mins
identification of continuous assessment opportunities in		3.2 Identify and address areas that require clarification.	

	the lesson. Each	3.2 Ask tutors in their	e.g. formation of groups to	
	lesson should	subject groups to	develop a uniform	
	include at least	identify and address	assessment techniques/	
	two opportunities	areas that may require	procedure to assess	
	to use continuous	clarification. e.g.	practical work of	
		•		
	assessment to	Some tutors may need	students, how to use	
	support student	further information on	spread sheet to facilitate	
	teacher learning	the following:	recording of continuous	
٠	Resources:	• formation of groups to	assess marks especially	
	$\circ$ links to the	develop a standardised	in large classes.	
	existing PD	assessment technique /	Industrial attachment for	
	-		students to use	
	Themes, for	procedure to assess		
	example, action	practical work of	machines so as to reduce	
	research,	students,	fear, GESI and SEN	
	questioning and	<ul> <li>how to use spread</li> </ul>	issues.	
	to other	sheet to facilitate		
	external	recording of		
	reference	continuous assess		
	material:	marks especially in		
	literature, on	large classes.		
	web, Utube,	<ul> <li>Industrial attachment</li> </ul>		
	physical	for students to use		
	resources,	machines so as to		
	power point;	reduce fear, GESI and	3.3 Write on flip chart any	
	• • •	-	identified linkages	
	how they	SEN issues.	_	
	should be used.		between lesson 4 and	
	Consideration	3.3 Ask tutors to write on	the Basic School	
	needs to be	flip charts any	Curriculum and how you	
	given to local	identified linkages	can use the teaching	
	availability	between lesson 4 and	learning activities to	
	Tutors should be	the Basic School	enhance student	
•			teacher's performance	
	expected to have a	Curriculum and discuss	-	
	plan for the next	how they can use the	at the STS.	
1	lesson for student	teaching learning		
1	teachers	activities to enhance		
1		student teacher's	e.g.	
1		performance at the	critically compare the	
		STS.	structure between them	
			e.g. Forms of assessment;	
		e.g.	both curriculum uses	
		Forms of assessment;		
		both curricula use	assessment of, as and for.	
		assessment of, as and for.	They all assess cognitive,	
		They all assess cognitive,	affective and psychomotor	
		affective and psychomotor	domains.	
		domains	3.4 share how you will	
			expedite the transfer of	
			ICT and 21 <sup>st</sup> century to	

3.4 Ask participants to think-pair-share how they will expedite the transfer of ICT and 21 <sup>st</sup> century skills to their students during the teaching and learning of lesson 4.	their students during the teaching and learning of lesson 4	
e.g. the use of mobile phones to surf for information from the internet, use of laptops and projectors to do presentation on measurement etc.	e.g. the use of mobile phones to surf for information from the internet, use of laptops and projectors to do presentation on measurement etc.	
3.5 Ask tutors to read their manuals, identify and discuss the continuous assessment opportunities in lesson 4 in the area of subject portfolio and subject based projects and their alignment with the NTEAP. Refer to PD Session 1 above for summary of NTEAP.	3.5 Read your manuals, identify and discuss the continuous assessment opportunities in lesson 4, in the area of subject portfolio and subject based projects and their alignment with the NTEAP. Refer to PD Session 1 above for summary of NTEAP.	
3.6 Guide tutors to identify Teaching Learning Resources needed to support the teaching and learning of lesson 3	3.6 Identify TLRs or other resources needed to be developed to support the teaching and learning.	
e.g. internet facility, mobile phones, laptop for report writing, ePortfolio, Picture Making tools (such as pencil, pens, brushes, pallet knife, easels, donkey, etc., Picture Making materials (such as colour/pigment [poster, gouache, acrylics, water colour, oils], canvas, etc.),	e.g. Picture Making tools (such as pencil, pens, brushes, pallet knife, easels, donkey, etc., Picture Making materials (such as colour/pigment [poster, gouache, acrylics, water colour, oils], canvas, etc.), Computers and accessories, projectors, smart boards, studio, physical	
Computers and	environment, models, etc.	

	accessories, projectors, smart boards, studio, physical environment, models, etc.		
<ul> <li>4. Evaluation and review of session:</li> <li>Tutors should Identifying critical friends to observe lessons and report at next session.</li> <li>Identifying and addressing any outstanding issues relating to the lesson/s for clarification</li> </ul>	<ul> <li>4.1 Ask tutors to identify a critical friend (subject specialist) to observe his or her lesson and report at the next PD session.</li> <li>4.2 Ask tutors if there is any outstanding issue and resolve them Note: Involve all tutors should there be any challenge.</li> </ul>	<ul> <li>4.1 Identify a critical friend (subject specialist) to observe your lesson and report at the next PD session.</li> <li>4.2 lidentify any outstanding issues relating to lesson 4 for clarification.</li> </ul>	15 mins
	4.3 Ask tutors to develop a concrete plan for teaching lesson 4.	<ul> <li>4.3 Develop your own work plan for teaching lesson</li> <li>4 based on your knowledge gained from PD session</li> </ul>	

## Tutor PD Session for Lesson 5 in the Course Manual

Focus: the bullet points provide the frame for what is to be done in the session. The SWL should use the bullets to guide what they write for the SL/HoD and tutors to do and say during each session. Each bullet needs to be addressed and specific reference should be made to the course manual/s.	Guidance notes on Leading the session. What the SL/HoDs will have to say during each stage of the session	Guidance Notes on Tutor Activity during the PD Session. What PD Session participants (Tutors) will do during each stage of the session.	Time in session
<ol> <li>Introduction to the session</li> <li>Review prior learning</li> <li>A critical friend to share findings for a short discussion and</li> </ol>	<ul> <li>1.1 Energizer</li> <li>Begin the session by asking a tutor to give an energizer to prepare tutors for the day's activities</li> <li>Reflection Activity</li> </ul>	1.1 Energizer Create and give an energizer that you will use to prepare your student teachers for the lesson 5 activities Reflection Activity	20 mins
<ul> <li>lessons learned</li> <li>Reading and discussion of the introductory sections of the lesson up to and</li> </ul>	1.2 Use leading questions to guide tutors to share their achievements and challenges in delivery lesson 4	1.2 Share your achievements and challenges in delivery lesson 4	
<ul> <li>earning including outcomes and indicators</li> <li>Overview of content and identification of any distinctive</li> </ul>	1.3 Invite one of the critical friends to share his observations on lesson 4 for the group to reflect together to improve practice.	<ol> <li>1.3 Listen and reflect on the critical friend's observation to improve your practice.</li> </ol>	
aspects of the lesson/s, NB The guidance for SL/HoD should identify and address	1.4 <u>Ask tutors to tell how</u> <u>students will be</u> <u>prepared to employ</u> <u>relevant teaching,</u> <u>learning and assessment</u>	1.4 <u>Ask tutors to tell how</u> <u>students will be</u> <u>prepared to employ</u> <u>relevant teaching,</u> <u>learning and assessment</u>	

any areas where tutors might require clarification on any aspect of the lesson. NB SL/HoD should ask tutors to plan for their teaching as they go through the PD session	<ul> <li>strategies during the basic school classroom work in STS in year 4 semester1. (Collect a few examples for discussion).</li> <li>1.5 Ask tutors to read the introduction sections of lesson 5 in their</li> </ul>	strategies during the basic school classroom work in STS in year 4 semester 1. 1.5 Read the introduction sections of lesson 5 in your respective TVET
	respective TVET course manuals	course manual
	1.6 Ask tutors to sit in their respective TVET groups to discuss the learning outcomes and align them with the learning indicators to see their achievability.	1.6 Sit in your respective TVET groups to discuss the learning outcomes and align them with the learning indicators to see their achievability.
	<ol> <li>1.7 Ask tutors to study and discuss the overview of lesson 5 and write the distinctive features of the lesson on a flipchart.</li> <li>Note</li> </ol>	1.7 Study and discuss the overview of lesson 5: write the distinctive features of the lesson on a flipchart. Note
	Refer to the respective TVET Course Manuals	Refer to the respective TVET Course Manuals
	<ul> <li>Agriculture</li> <li>TVET Course Manuals</li> <li>Overview of the programme</li> <li>Agriculture will be looking at</li> <li>Test Validity</li> </ul>	<ul> <li>Agriculture</li> <li>TVET Course Manuals</li> <li>Overview of the programme</li> <li>Agriculture will be looking at</li> <li>Test Validity</li> </ul>
	<ul> <li>Home Economics</li> <li>Test: meaning of test, types of test</li> </ul>	<ul> <li>Home Economics</li> <li>Test: meaning of test, types of test</li> </ul>
	<ul> <li>Technical Skills</li> <li>Types of Assessment Techniques for Technical Education</li> </ul>	Technical Skills <ul> <li>Types of Assessment</li> <li>Techniques for</li> <li>Technical Education</li> </ul>

	<ul> <li>Entrepreneurial opportunities in Technical Skills</li> <li>Visual Art         <ul> <li>General Principles of School Based Assessment Test Validity and Reliability</li> <li>Besides Visual Art will also be looking at Perspective drawing in all the 2-D areas; i.e. Graphic Design, Picture Making, etc.</li> <li>They will also explore ideas for textile making as well as colour.</li> </ul> </li> </ul>	<ul> <li>Visual Art</li> <li>General Principles of School Based Assessment Test Validity and Reliability</li> <li>Besides Visual Art will also be looking at Perspective drawing in all the 2-D areas; i.e. Graphic Design, Picture Making, etc.</li> <li>They will also explore ideas for textile making as well as colour.</li> </ul>	
<ul> <li>2. Concept Development (New learning likely to arise in lesson/s):</li> <li>Identification and discussion of new learning, potential barriers to learning for student teachers or students, concepts or pedagogy being introduced in the lesson, which need to be explored with the SL/HoD</li> <li>NB The guidance for SL/HoD should set out what they need to do to introduce and explain the issues/s with tutors</li> </ul>	Concept Development 2.1 Ask tutors to read the lesson description and identify the new learning areas of lesson 5 and with a friend, e.g. <i>TVET Course Manuals</i> Agriculture <i>Test Validity: construct</i> validity, content validity, face validity and criterion validity as well as basic principles of assess test validity Home Economics <i>Test: meaning of test, types</i> of test (diagnostic test) characteristics (reliability) and functions of tests in education (to evaluate teaching and learning process) and basic principles construction test items.	Concept Development 2.1 Read the lesson description and identify the new learning areas of lesson 5 and with a friend, e.g. Refer to the respective TVET Course Manuals Agriculture Test Validity: construct validity, content validity, face validity and criterion validity as well as basic principles of assess test validity Home Economics Test: meaning of test, types of test (diagnostic test) characteristics (reliability) and functions of tests in education (to evaluate teaching and learning process) and basic principles construction test items.	15 mins

Technical Skills	Technical Skills
Types of Assessment	Types of Assessment
Techniques for Technical	Techniques for Technical
Education: exams, oral	Education: exams, oral
presentation, peer review,	presentation, peer review,
portfolios. Entrepreneurial	portfolios. Entrepreneurial
opportunities in Technical	opportunities in Technical
Skills	Skills
SKIIIS	SKIIS
Visual Art	Visual Art
General Principles of School	General Principles of School
Based Assessment: Test	Based Assessment: Test
Validity and Reliability (test-	Validity and Reliability (test-
retest, correlation,	retest, correlation,
interrater, and parallel	interrater, and parallel
forms)	forms)
Perspective drawing in the	Perspective drawing in the
graphic arts	graphic arts
<u> </u>	
Perspective drawing in the	Perspective drawing in the
graphic arts: Types of	graphic arts: Types of
perspective (1-point	perspective (1-point
perspective, 2-point	perspective, 2-point
perspective), horizon line	perspective), horizon line
and two dimensional	and two dimensional
produce on a flat surface.	produce on a flat surface.
Studio Practice in Colour,	Studio Practice in Colour,
Pigments and Media (oils,	Pigments and Media (oils,
water based and dry	water based and dry
pigments): colour theory,	pigments): colour theory,
testing, paint and pigment.	testing, paint and pigment.
Thinking and Exploring	Thinking and Exploring
ideas for making Textile	ideas for making Textile
Design (I): design process,	Design (I): design process,
ideas generation, design	ideas generation, design
development and the new	development and the new
design.	design.
Refer to the respective	Refer to the respective
neger to the respective	
2.2 Ask tutors to point out	2.2 Point out notontial
2.2 Ask tutors to point out	2.2 Point out potential
potential barriers to the	barriers to the teaching
teaching/learning of	learning of concepts in
concepts in lesson 5 and	lesson 5 and possible
suggest possible ways of	ways of overcoming
overcoming same, e.g.	same, e.g.

r	· · · · · · · · · · · · · · · · · · ·	
<ul> <li>Some student teachers may find the concept of assessment difficult to adopt because of lack of a uniform criterion for assessment.</li> <li>Negative attitudes of student teachers toward assessment activities (copy work, refusal to participate in group activities)</li> <li>Inadequate resources and studio facilities for practical colour work.</li> <li>Misconceptions about the relevance of figures and perspective drawing in relation to varied socio-cultural background of students</li> </ul>	<ul> <li>Some student teachers may find the concept of assessment difficult to adopt because of lack of a uniform criterion for assessment.</li> <li>Negative attitudes of students toward assessment activities (copy work, refusal to participate in group activities).</li> <li>Inadequate of resources and studio for practical work.</li> <li>Misconceptions about the relevance of figures and perspective drawing in relation to varied socio-cultural background of students</li> </ul>	
2.3 Ask tutors to use concept maps and other appropriate methods to identify major concepts and align them to pedagogical techniques stated in the lesson	2.3 Discuss using concept maps to identify major concepts and align them to pedagogical techniques stated in the lesson	
2.4 Guide tutors to use radio call-in model to discuss alternative teaching and learning strategies that could be used to help student teachers develop a comprehensive pedagogical-content knowledge.	2.4 Use radio call-in model to discuss alternative teaching and learning strategies that could use to help student teachers develop a comprehensive pedagogical-content knowledge	
(Radio call-in: ask each group to select a radio station. Using a folded paper as an improvised micro-phone, let tutors to call-in and make their submission to the host who	(Radio call-in: ask each group to select a radio station. Using a folded paper as an improvised micro-phone, let tutors to call-in and make their submission to the host who	

		will tabulate and summarize	will tabulate and summarize	
		all suggestions received)	all suggestions received)	
3.	Planning for	Planning the lesson	Planning the lesson	40 mins
	teaching,	3.1 Invite a volunteer to	3.1 Participate in a model	
	learning and	model a presentation	presentation and share	
	assessment	on selected teaching	your reflections for a	
	activities for the	and learning activities	discussion.	
	lesson/s	for the group to		
•	Reading and	observe and reflect for		
	discussion of the	a discussion.		
	teaching and		2.2 Douticizato in the	
	learning activities	3.2 Using a snowball	3.2 Participate in the snowball activities to	
•	Noting and	technique guide tutors to ask and/or respond	clarify any challenging	
	addressing areas where tutors	to questions on issues	issues,	
	may require	that require	135003,	
	clarification	clarification,		
•	Noting	e.g.	e.g.	
	opportunities for	Either get a ball or fold a	Either get a ball or fold a	
	making links to	piece of polythene bag or	piece of polythene bag or	
	the Basic School	paper into a ball. Invite	paper into a ball. Invite	
	Curriculum	questions from the group.	questions from the group.	
•	Noting	Give the ball to the tutor	Give the ball to the tutor	
	opportunities for	ready to ask the first	ready to ask the first	
	integrating: GESI	question. This teacher (who	question. This teacher (who	
	responsiveness	asked the question) throws	asked the question) throws	
	and ICT and 21 <sup>st</sup> C	the ball to another tutor	the ball to another tutor	
	skills	whom he/she expects to	whom he/she expects to	
•	Reading,	answer. After answering, he	answer. After answering, he	
	discussion, and	also asks a question and	also asks a question and	
	identification of	then throws the ball to	then throws the ball to	
	continuous	another and the process continues until the all	another and the process continues until the all	
	assessment	members have their turn.	members have their turn.	
	opportunities in	Guidance Note	Guidance Note	
	the lesson. Each lesson should	Snowball methods of	Snowball methods of	
	include at least	Teaching/learning	Teaching/learning	
	two	Snowball technique is a way	Snowball technique is a way	
	opportunities to	for students to teach each	for students to teach each	
	use continuous	other important concepts	other important concepts	
	assessment to	and information. The	and information. The	
	support student	Students begin to work	Students begin to work	
	teacher learning	alone, then they collaborate	alone, then they collaborate	
•	Resources:	with a partner. Partners	with a partner. Partners	
	<ul> <li>links to the</li> </ul>	form groups of four (4).	form groups of four (4).	
	existing PD	Groups of 4 join together to	Groups of 4 join together to	

Themes, for	become groups of 8, etc.	become groups of 8, etc.	
example,	The snowballing continues	The snowballing continues	
action	until the entire class is	until the entire class is	
research,	working together as one big	working together as one big	
questioning	group.	group.	
and to other			
external	3.3 Ask tutors to read the	3.3 Read the assessment	
reference	assessment activities in	activities in your	
material:	their respective course	respective course	
literature, on	manuals and list	manuals and list	
	addition or alternative	additional or alternative	
web, Utube,			
physical	assessments activities	assessments activities	
resources,	that could be used to	that could be used to	
power point;	assess student teachers	assess student teachers	
how they	in relation to subject	in relation to subject	
should be	portfolios and subject	portfolios and subject	
used.	projects, e.g. tutor, peer	projects.	
Consideration	and self-assessment of		
needs to be	practical work,		
given to local	documentation,		
savailability	illustrations and		
<ul> <li>guidance on</li> </ul>	practical activity, etc.		
any power	proceed activity, etc.		
point	3.4 Ask tutors to discuss	3.4 Participate in the	
		discussion and share	
presentations,	how they would help		
TLM or other	their student teachers	view on how you would	
resources	to link the lesson 5	help your student	
which need to	activities with the Basic	teachers to link lesson 5	
be developed	Design and Technology	activities with the Basic	
to support	curriculum (JHS).	Design and Technology	
learning	e.g.	curriculum (JHS), e.g.	
Tutors should be	Provide a checklist to guide	Provide a checklist to guide	
expected to have	student teachers to collect	student teachers to collect	
a plan for the	information on similarities:	information on similarities:	
next lesson for	(Los, Lls, content, pedagogy	(Los, LIs, content, pedagogy	
student teachers	and assessment techniques	and assessment techniques	
	to Strand, Content	to Strand, Content	
	Standard, Indicators and	Standard, Indicators and	
	Exemplars in Career	Exemplars in Career	
	Technology curriculum).	Technology curriculum).	
	3.5 Ask individual tutors to	3.5 Brain write how you	
	brain write how they	would integrate GESI,	
	would integrate GESI,	ICT, SEN and 21 <sup>st</sup> C skills	
	ICT, SEN and 21 <sup>st</sup> C skills	in your lesson 5 on a	
	in their lesson 5s on a	sticky pad and pastes on	
	sticky pad and pastes on	a wall for a gallery walk.	

#### a wall for a gallery walk, e.g.

GESI:

Provide reasonable timelines for student teachers to submission of assignment for Student teachers with ill health including females with painful menstruation.

#### ICT:

Engage student teachers in the use of their smart phone to surf the internet for relevant information, PowerPoint presentation, pictures, videos some assessment processes, spread sheets, excel, etc.

#### SEN:

Make efficient use of groupings, seating arrangements, etc. to promote comfort and easy access and equal participation in lessons among all students especially those with SEN. 21 C skills: make efficient use of mini groups activities and other innovative teaching pedagogies such as 'Muddies point' to promote Critical thinking and problem solving and Personal development. NB. Muddies Point This is perhaps the simplest classroom assessment technique available. It is a quick monitoring technique in which students are asked to take a few minutes to write down the most difficult or confusing part of a lesson, lecture or reading

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https://www.mghihp.edu	https://www.mghihp.eduht	
>examples	<u>tps://www.mghihp.edu</u>	
	>examples	
3.6 Ask tutors to read in	3.6 Select your pair to read	
pairs and list the	and list the teaching and	
teaching and learning	learning resources stated	
resources stated in their	in your respective TVET	
respective TVET Course	Course Manual, e.g. <i>e.g.</i>	
Manuals, e.g. drawing	drawing tools (pen,	
tools (pen, pencil, brush.	pencil, brush. Palette	
Palette knife, etc.),	knife, etc.), mobile	
mobile phones, laptop	phones, laptop	
computer/PCs, Internet	computer/PCs, Internet	
facility, Textbooks and	facility, Textbooks and	
Concept Map	Concept Map	
3.7 Encourage tutors to	3.7 Identify other suitable	
•		
identify other suitable	teaching and learning	
teaching and learning	resources you could use	
resources they could use	to make learning more	
to make learning more	meaningful among the	
meaningful, e.g.	student teachers.	
Guidance Note	Guidance Note	
Encourage tutors to build	Encourage tutors to build	
data base of variety of	data base of variety of	
items including sample	items including sample	
tools, materials, assessment	tools, materials, assessment	
tools, colours sample colour	tools, colours sample colour	
works, videos and pictures,	works, videos and pictures,	
perspective drawings and	perspective drawings and	
drawing tools including	drawing tools including	
computers and projector as	computers and projector as	
well pre-recorded lessons on	well pre-recorded lessons on	
the various TVET domain to	the various TVET domain to	
upload on students on-line	upload on students on-line	
learning platforms e.g.	learning platforms e.g.	
WhatsApp and google class.	WhatsApp and google class.	
2 9 Ack tutors to plan	2.9 Plan together and	
3.8 Ask tutors to plan	3.8 Plan together and	
together and prepare	prepare the outline of	
the outline of their	their respective lessons	
respective lessons to	to guide their lesson 5	
guide their lesson 5	presentation.	
presentation.		

<ul> <li>Evaluation and review of session:</li> <li>Tutors should Identifying critical friends to</li> </ul>	Evaluation and review of session: 4.1 Invite a volunteer to give a brief recap of the main issues discussed in	Evaluation and review of session: 4.1 Reflect and present a brief recap of the main issues discussed in the	15 mins
<ul> <li>observe lessons and report at next session.</li> <li>Identifying and addressing any outstanding issues relating to the lesson/s for clarification</li> </ul>	the session. 4.2 Ask tutors to invite new faces as critical friends to sit in and observe their lesson 5s and provide relevant inform on their practice to promote reflective practices among tutors.	session today. 4.2 Invite a new face as critical friend to observe your lesson and provide feedback during your post presentation reflection to improve your professional practices.	
	4.3 Ask tutors to write down any outstanding issues relating to the lesson 5s for clarification	4.3 Write down any outstanding issues relating to the lesson 5s for clarification	
	Preparation Before next PD Session Encouraged tutors to read lesson 6 in their respective course manuals before the next PD session	Preparation Before next PD Session Read lesson 6 in your respective course manual before the next PD session	

# Tutor PD Session for Lesson 6 in the Course Manual

Focus: the lipoints prov frame for we to be done session. The should use bullets to g what they we the SL/HoD tutors to do say during of session. Each needs to be addressed a specific refe should be me the course manual/s.	ride the /hat is in the e SWL the uide write for and o and cand each ch bullet and erence made to	Guidance notes on Leading the session. What the SL/HoDs will have to say during each stage of the session	Guidance Notes on Tutor Activity during the PD Session. What PD Session participants (Tutors) will do during each stage of the session.	Time in session
<ol> <li>Introduction</li> <li>the sess</li> <li>Review</li> <li>learning</li> </ol>	<b>ion</b> prior	<ol> <li>1.1. Ask a tutor to start the session with an icebreaker.</li> </ol>	1.1 Start the session with an icebreaker.	20 mins
<ul> <li>A critica to share findings</li> </ul>	Il friend for a scussion sons	<ul><li>1.2. Ask tutors to share their experiences of the previous PD session, e.g. your successes and challenges.</li></ul>	1.2 Share your experiences from the previous PD session, e.g. your successes and the challenges.	
<ul> <li>Reading discussi the intro sections</li> </ul>	g and on of oductory of the up to and g	<ul> <li>1.3. Ask the critical friend(s) to report on Lesson 5 with the group for a brief discussion on issues raised.</li> <li>1.4. <u>Ask tutors to tell how</u></li> </ul>	<ul> <li>1.3 Report on your observation of the teaching of Lesson 5. Discuss issues raised.</li> <li>1.4. <u>Ask tutors to tell how</u></li> </ul>	
outcom indicato	es and	students will be prepared to employ relevant teaching,	students will be prepared to employ relevant teaching,	
<ul> <li>Overvie content identific any dist</li> </ul>	and ation of	<u>learning and</u> <u>assessment strategies</u> <u>during the basic school</u> <u>classroom work in STS</u> <u>in year 4 semester 1.</u>	<u>learning and</u> <u>assessment strategies</u> <u>during the basic school</u> <u>classroom work in STS</u> <u>in year 4 semester 1.</u>	

	aspects of the lesson/s,	(Collect a few examples for discussion)		
SL/ ide add wh rec on the NE ask for the	The guidance for HoD should ntify and dress any areas ere tutors might juire clarification any aspect of e lesson. 3 SL/HoD should a tutors to plan their teaching as ey go through the session	1.5. Ask tutors to read the introductory sections of Lesson 6 (up to learning outcomes) and discuss in pairs the important or distinctive features of the Lesson. e.g. credibility of a test results or examination, tests validity and reliability etc. <i>Refer to your</i> <i>respective TVET</i> <i>manuals taking into</i> <i>consideration the</i> <i>various topics in lesson</i> <i>6.</i>	1.5. Read the introductory sections of Lesson 6 (up to learning outcomes) and discuss in pairs the important or distinctive aspects of the Lesson. e.g. credibility of a test results or examination, tests validity and reliability etc. <i>Refer to your</i> <i>respective TVET</i> <i>manual taking into</i> <i>consideration the</i> <i>various topics in lesson</i> <i>6.</i>	
		<ul> <li>1.6. Ask tutors to read the Overview of content and identify any distinctive aspects of the lesson. e.g. concepts of assessment, measurement and evaluation, the role and purpose of assessment in education. etc.</li> <li>(Refer to the respective TVET manual).</li> </ul>	<ul> <li>1.6. Read the Overview of content and identify any distinctive aspects of the lesson, e.g. concepts of assessment, measurement and evaluation, the role and purpose of assessment in education. etc.</li> <li>(Refer to your respective TVET manual).</li> </ul>	
•	Concept Development (New learning likely to arise in lesson/s): Identification and discussion of new learning, potential barriers to	<ul> <li>2.1 Ask tutors to read and discus the new learning in lesson 6, e.g.</li> <li>Agriculture <ul> <li>Test Reliability.</li> </ul> </li> <li>Home Economics <ul> <li>Test Reliability and validity.</li> </ul> </li> </ul>	<ul><li>2.1. Identify and discus the new learning of lesson</li><li>6.</li></ul>	15 mins

learning for	Technical		
student	• The Role of		
teachers or	Continuous		
students,	Assessment.		
concepts or	<ul> <li>Medium business</li> </ul>		
pedagogy being	enterprise		
introduced in			
the lesson, which need to	Visual Art		
be explored	Preparing the		
with the SL/HoD	marking scheme.		
NB The guidance for	<ul> <li>Thinking and exploring ideas for</li> </ul>		
SL/HoD should set	making Picture		
out what they need	Making (I)		
to do to introduce	Thinking and		
and explain the	exploring ideas for		
issues/s with tutors	making Graphic		
	Design (I).		
	<ul> <li>Thinking and</li> </ul>		
	exploring ideas for		
	making Textile		
	products (II).		
	2.2. Ask tutors to discuss	2.2 Dissues notontial	
	potential barriers to	2.2. Discuss potential barriers to learning for	
	learning for student	student teachers or	
	teachers,	students,	
	e.g. Some tutors may have	e.g. Some tutors may have	
	the difficulty of setting	the difficulty of setting the	
	reliable tests,	length of test to ensure an	
	The difficulty level and	appropriate value of	
	clarity of expression of a	reliability,	
	test item also affect the	The difficulty level and	
	reliability of test scores, etc. Some student teachers may	clarity of expression of a	
	find it a challenging task to	test item also affect the	
	conceptualize, perceive and	reliability of test scores, etc. Some student teachers may	
	illustrate ideas.	find it a challenging task to	
	Some student teachers and	conceptualize, perceive and	
	tutor see Graphic Design,	illustrate ideas.	
	Picture Making and Textile	Some student teachers and	
	design as time consuming	tutor see Graphic Design,	
	because a lot of time is	Picture Making and Textile	
	needed in the planning,	design as time consuming	
	preparation and execution	because a lot of time is	
	of artefacts, etc.	needed in the planning,	

	The perception that Graphic Design and Picture Making are not for females and people with SEN. Tutors must use positive motivation to encourage student teachers especially female and people with SEN have made. Invite resource persons to further explain the concept and interact with student teachers as a way of motivation. Take student teachers for a community walk to interact with persons with SEN performing TVET activities in the communities, etc. 2.3 Ask tutors to discuss the concept (s) or/and pedagogy for the lesson. e.g. playful games or forms of visual exercises, discussion, Think-Pair- share, brainstorming, questioning, display of objects or pictures, etc.	<ul> <li>preparation and execution of artefacts, etc.</li> <li>The perception that Graphic Design and Picture Making are not for females and people with SEN.</li> <li>Tutors must encourage student teachers on the success some female and people with SEN have made.</li> <li>Invite resource persons to further explain the concept and interact with student teachers as a way of motivation.</li> <li>Take student teachers for a community walk to interact with persons with SEN performing TVET activities in the communities, etc.</li> <li>2.3. Discuss the concept or pedagogy for the introduction of the lesson. e.g. playful games or forms of visual exercises, illustration, discussion, Think-Pair-share, brainstorming, questioning, display of objects or pictures, etc.</li> </ul>	
<ul> <li>3. Planning for teaching, learning and assessment activities for the lesson/s</li> <li>Reading and discussion of the teaching and learning activities.</li> </ul>	<ul> <li>3.1. Ask tutors to read and discuss some of the teaching and learning activities in lesson 6.</li> <li>e.g. group work, group discussions, think, pair and share, independent study, etc.</li> <li>3.2. Ask tutors to suggest other possible teaching</li> </ul>	<ul> <li>3.1. Read and discus the teaching and learning activities in lesson 6.</li> <li>e.g. group work, group discussions, think, pair and share, independent study, etc.</li> <li>3.2. Suggest other possible teaching and learning</li> </ul>	40 mins

<ul> <li>Noting and addressing and learning activities, e.g. Cross over learning internet platform (Cloud Computing), industrial attachment, Power Point Presentation, etc.</li> <li>Noting opportunities for making links for making links to the Basic School learning it is built on the principle that 'anyone can now learn anything from anyone at any time (Bonk, 2009) It refers to a comprehensive understanding of learning the bar 'anyone at any time (Bonk, 2009) It refers to a comprehensive understanding of learning that bridges formal and informal learning setting. Learning in the Colleges and schools can be enriched with experiences from everyday IJE. Informal learning can also be deepened by adding questions and knowledge from the classroom. In cross over learning is meaved. Cross over learning is meaved. Cross over learning is a relatively new approach to learning that bridges formal and informal learning setting. Learning in the Colleges and schools can be enriched with experiences from everyday IJE. Informal learning can also be deepened by adding questions and knowledge from the classroom. In cross over learning is made easy through e-learning. that chassroom. In cross over learning is made easy through e-learning is made easy through e-learning. and to other external research, questioning and to other external reference is udents should be done (students with SEN should be considered when grouping of students for group</li> </ul>					
areas where tutors may require clarification.Teaching, internet platform (Cloud Computing), industrial attachment, Power Point Presentation, etc.Noting opportunities for making links to the Basic Corso sover learning is a relatively new approach to learning, it is built on the principle that 'anyone can now learn anything from anyone at any time (Bonk, 2009) It refers to a comprehensive understanding of learning that bridges formal and informal learning setting. learning in the Colleges and schools can be enriched with experiences from everyday life. Informal learning the dichotomy between formal and informal learning is made easy through e-learning, taction two opportunities to use continuous assessment to support student teacher learning enters form every tay life. Informal is moded. Cross over learning is made easy through e-learning, industrial attachment. (https://www.aace.orgPlatform (Cloud Computing), industrial attachment, Power Point Presentation, etc.Noting opportunities to continuous assessment opportunities to use continuous assessment to support student teacher learning action research, questioning and to other external reference muterial:Teaching, internet platform (Cloud Computing), industrial attachment, Power Point Presentation, etc.0links to the existing PD Themes, for example, action research, questioning and to other external reference material:Teaching, internet plating is made easy through e-learning, is industrial attachment. (https://www.aace.org0links to the existing PD Themes, for example, action3.3. Ask tutors	•	Noting and	and learning activities,	activities, e.g. Cross	
tutors may require clarification.platform (Cloud Computing), industrial attachment, PowerNoting opportunities for making links to the Basic School curriculumNB. Cross over learning is a relatively new approach to learning. it is built on the principle that 'anyone can now learn anything from anyone at any time (Bonk, 2009) It refers to a comprehensive 2009) It refers to a comprehensive understanding of learning that bridges formal and informal learning at the bridges formal and discussion, and identification of continuous assessment two opportunities to learning the at least teacher learning exerplay thats to the exerplay life. Informal learning is assessment to support student teacher learning o links to the existing PD Themes, for example, action mescrch, questioning and to other external research, questioning and to other external reference martial:platform (Cloud Computing), industrial attachment, Power Point Presentation, etc.Noting opportunities in include at least two opportunities to use continuous assessment to support student support student teacher learning and to other external reference martial:platform (Cloud Cross over learning is industrial attachment. (https://www.aace.orgComputing), industrial attachment. Power Point Presentation, etc.Noting opportunities in industrial learning continuous assessment to support studentplatform (Cloud consover learning is industrial attachment. (https://www.aace.orgComputing), industrial attachment is removed. Cross over learning is industrial attachment. (https://www.aace.orgNoting t		addressing	e.g. Cross over	over Teaching, internet	
require clarification.Computing), industrial attachment, Power Point Presentation, etc.Noting opportunities for making links to the Basic SchoolNB.NB.Cross over learning is a relatively new approach to learning, it is built on the principle that 'anyone can now learn anything from anyone at any time (Bonk, 2009) It refers to a comprehensive understanding of learning that bridges formal and informal learning setting. Learning in the Colleges and schools can be enriched with experiences from everyday life. Informal learning can also be deepened by adding deepened by adding d		areas where	Teaching, internet	platform (Cloud	
<ul> <li>clarification.</li> <li>Noting opportunities for making links to the Basic</li> <li>Cross over learning is a relatively new approach to learning, it is built on the principle that 'anyone can now learn anything from anyone at any time (Bonk, 2009) It refers to a comprehensive and ICT and 21<sup>st</sup> C skills</li> <li>Reading, discussion, and discussion, and dinformal learning environment is removed. Cross over learning is dider tradition forms of crossover learning is and address areas that may require clarification.</li> <li>3.3. Ask tutors to identify and address areas that may require clarification.</li> <li>4.3. Identify and address areas that require clarification.</li> <li>4.3</li></ul>		tutors may	platform (Cloud	Computing), industrial	
<ul> <li>Noting opportunities for making links to the Basic School</li> <li>Noting opportunities for integrating: GESI</li> <li>Reading, discussion, and identification of continuous assessment opportunities for links to the existing PD Themes, for example, action</li> <li>Noting opportunities for integrating: GESI</li> <li>Reading, discussion, and identification of continuous assessment opportunities to use continuous assessment to cube to supportsuidets</li> <li>Resources: o links to the existing PD Themes, for example, action material:</li> <li>Noting opportunities include at learning and to other</li> <li>Noting opportunities include at learning and to other</li> <li>Resources: o links to the external research, questioning and to other</li> <li>Noting opportunities in use continuous assesting PD Themes, for example, action</li> <li>Resources: o links to the external research, questioning and to other</li> <li>Nas. Cross over learning is the learning can also be deepened by adding questions and knowledge from the classroom. In cross over learning is made easy through e-learning. other tradition forms of cross over learning is mad address areas that may require clarification.</li> <li>Resources: o links to the existing PD Themes, for example, action reserch, questioning and to other</li> <li>Resources: o links to the clarification.</li> <li>Ask tutors to identify and address areas that may require clarification.</li> <li>Ask tutors to identify and address areas that may require clarification.</li> <li>Can bo be considered when (students with SEN should be considered when</li> </ul>		require	Computing), industrial	attachment, Power	
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reference material:(students with SEN should be considered when(students with SEN should be considered when					
material: be considered when be considered when					
			-		
literature, on grouping students for grouping students for group					
		literature, on	grouping students for	grouping students for group	

	web, Utube,	group work). How to	work). How to develop 21 <sup>st</sup>
	physical	develop 21 <sup>st</sup> century skills in	century skills in student
	resources,	student teachers such as	teachers such as leadership
			-
	power point;	leadership skills,	skills, collaboration,
	how they	collaboration, cooperation	cooperation etc. How to
	should be	etc. How to organise a	organise a community walk
	used.	community walk as way of	as way of teaching, how
	Consideratio	teaching, how teaching	teaching through Cloud
	n needs to	through Cloud Computing	Computing are organise etc.
			Computing the organise etc.
	be given to	are organise etc.	
	local		
	availability	3.4. Ask tutors to identify	3.4. Identify links between
	<ul> <li>guidance on</li> </ul>	links between lesson 6	lesson 6 and the Basic
	any power	and the career	School Curriculum
	••		
	point	Technology Curriculum	during their STS. e.g.
	presentation	during their STS. e.g.	Assisting student
	s, TLR or	the relationship	teachers to set test
1	other	between idea	items and conduct test
	resources	development in lesson	for their pupils during
	which need	6 is same as in Career	STS (Embedding
	to be	Technology. The	teaching). How
	developed to	applicability of lesson 6	continuous assessment
	support	on assessment	are carried out and
	learning	(continuous	preparation of marking
•	Tutors should	assessment, test	schemes. Procedures
	be expected to	reliability and validity)	involved in the
	-		
	have a plan for	to the teaching and	exploration of ideas for
	the next lesson	learning of career	designing.
	for student	technology is similar.	
	teachers		
1		3.5. Ask tutors to identify	3.5. Identify opportunities
1		opportunities for	for integrating: GESI
		integrating: GESI	responsiveness and ICT
		responsiveness and ICT	and 21 <sup>st</sup> C skills into
		and 21 <sup>st</sup> Century skills	lesson 6.
		into lesson 6.	
		e.g. Invite resource persons	e.g. Invite resource persons
		who have demonstrated	who have demonstrated
		mastery over gender/SEN	mastery over gender/SEN
		stereotyping in the	stereotyping in the
		community, e.g. a female	community, e.g. a female
1		Graphic designer, Painter	Graphic designer, Painter
1		and a male textile designer.	and a male textile designer.
1		Being deliberate in creating	Being deliberate in creating
		mixed ability groupings as a	mixed ability groupings as a
		way of encouraging all	way of encouraging all
		student teachers to try their	student teachers to try their
		· · ·	· · · · · ·

portfolio and subject based	portfolio and subject based
session 1 above and focus their attention on subject	session 1 above and focus your attention on subject
portfolio and subject based	portfolio and subject based
projects considering the	projects considering the
following critical issues;	following critical issues;
a) Emphasis should be	a) Emphasis should be
placed on creative	placed on creative
application of	application of
knowledge and skills,	knowledge and skills,
innovation, teamwork	innovation, teamwork
and relevant	and relevant
application of ICT	application of ICT tools
tools and skills.	and skills.
b) Final products are not	b) Final products are not
the target yet, works	the target yet works
should be at least half	should be at least half
way completed.	way completed.
Assessment should	Assessment should
concentrate but not	concentrate but not
limited to	limited to
understanding and	understanding and
proper application of	proper application of
theories, principles,	theories, principles,
processes, procedures	processes, procedures
as well as appropriate	as well as appropriate
use of tools and	use of tools and
compliance with	compliance with safety
and at we load in the	rules in the studio and
safety rules in the	Tules III the studio und
studio and	workshops.

c) Student teachers must at this stage apply the concept and practice of Greening TVET. This will help them learn to act responsible towards the environment.	c) Student teachers must at this stage apply the concept and practice of Greening TVET. This will help them learn to act responsible towards the environment.	
NB. Tutors should develop power point presentation skills and other TLRs needed to support teaching and provide guidance.		
3.6. Guide tutors to identify TLR or other resources needed to be developed to support learning. <i>e.g.</i> <i>internet facility, library,</i> <i>laptop/mobile phones,</i> <i>charts, drawing room,</i> <i>interactive boards,</i> <i>Projector, text books,</i> <i>pictures, NTS/NTECF,</i> <i>NTEAP, etc.</i>	3.6. Identify TLR or other resources need to be developed to support learning. e.g. internet facility, library, laptop/mobile phones, charts, drawing room, interactive boards, Projector, text books, pictures, NTS/NTECF, NTEAP, etc.	
NB. The College should provide JHS Career Technology curriculum for tutors to study and interconnect Sub-strands in lesson 6. Student teachers should be assigned to develop TLRs as their project work from local materials available for their STS activities		
3.7. Make sure tutors have concrete plans for teaching lesson 6.	<ul><li>3.7. Articulate how you will use knowledge and understanding gained to prepare for lessons</li><li>6.</li></ul>	

•	Evaluation and review of session: Tutors should Identifying critical friends to observe	4.1. Ask tutors to invite a critical friend from the same or related discipline to observe lesson 6 and provide feedback.	4.1. Invite a critical friend from the same or related discipline to observe lesson 6 and provide feedback.	15 mins
•	lessons and report at next session. Identifying and addressing any	4.2. Ask tutors if there is any issue to be discussed.	4.2. Individually, identify any outstanding issues relating to lesson 6 for clarification.	
i i	outstanding issues relating to the lesson/s for clarification	<ul> <li>4.3. Ask tutors to read through lesson 7 of their course manuals in preparation for session 7.</li> </ul>	4.3 Read through lesson 7 of your course manuals in preparation for session 7.	
		In the case of unresolved issues refer to the SWLs		

## Tutor PD Session for Lesson 7 in the Course Manual

Focus: the bullet points provide the frame for what is to be done in the session. The SWL should use the bullets to guide what they write for the SL/Hood and tutors to do and say during each session. Each bullet needs to be addressed and specific reference should be made to the course manual/s.	Guidance notes on Leading the session. What the SL/HoDs will have to say during each stage of the session	Guidance Notes on Tutor Activity during the PD Session. What PD Session participants (Tutors) will do during each stage of the session.	Time in session
<ol> <li>Introduction to the session</li> <li>Review prior learning</li> <li>A critical friend to share findings for a short discussion and lessons learned</li> <li>Reading and discussion of the</li> </ol>	Ice Breaker Ask tutors to write 5 terminologies (words) they used in lesson 6 on A4 paper and share with the whole group. Count and rank the number of terminologies (words) that dominated.	Ice Breaker Write 5 terminologies (words) you used in lesson 6 on A4 paper and share with the whole group. Count and rank the number of terminologies (words) that dominated.	20 mins
<ul> <li>discussion of the introductory sections of the lesson up to and including learning outcomes and indicators</li> <li>Overview of content and identification of any distinctive aspects of the lesson/s,</li> <li>NB The guidance for SL/Hood should identify and address</li> </ul>	<ul> <li>1.1 Call a tutor to review PD Session 6 with the whole group.</li> <li>1.2 <u>Ask tutors to tell how</u> <u>students will be</u> <u>prepared to employ</u> <u>relevant teaching</u>, <u>learning and assessment</u> <u>strategies during the</u> <u>basic school classroom</u> <u>work in STS in year 4</u> <u>semester 1. (Collect a</u> <u>few examples for</u> <u>discussion</u>)</li> </ul>	<ul> <li>1.1 Review the previous PD session. Share your view with the whole group.</li> <li>1.2 T<u>ell how students will be prepared to employ relevant teaching, learning and assessment strategies during the basic school classroom work in STS in year 4 semester 1.</u></li> </ul>	

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any areas where tutors might require clarification on any aspect of the lesson. NB SL/Hood should ask tutors to plan for their teaching as they go through the PD session	<ul> <li>1.3 Ask tutors to read and discuss introductory sections of lessons 7 including learning outcomes and indicators.</li> <li>NB: The discussion must be based on the different concepts in lesson 7, e.g.</li> <li>Agriculture: • Test Validity</li> </ul>	<ul> <li>1.3 Read and discuss introductory sections of lessons 7 including learning outcomes and indicators.</li> <li>NB: The discussion must be based on the different concepts in lesson 7, e.g.</li> <li>Agriculture: • Test Validity</li> </ul>
	<ul> <li>Home Economics:</li> <li>Planning classroom tests and assessments</li> </ul>	<ul> <li>Home <i>Economics</i>:</li> <li>Planning classroom tests and assessments</li> </ul>
	<ul> <li>Technical:</li> <li>Assessment of Practical Works</li> <li>Medium business enterprise</li> <li>Visual Arts:</li> <li>How to mark Practical Works in Visual Art (Preliminary design/the Artist Portfolio)</li> <li>Thinking and Exploring ideas for making Graphic Design and Pictures</li> <li>Planning and Making Textile products, etc.</li> </ul>	<ul> <li>Technical:</li> <li>Assessment of Practical Works</li> <li>Medium business enterprise</li> <li>Visual Arts:</li> <li>How to mark Practical Works in Visual Art (Preliminary design/the Artist Portfolio)</li> <li>Thinking and Exploring ideas for making Graphic Design items (II)</li> <li>Thinking and Exploring ideas for making Pictures (II)</li> <li>Planning and Making Textile products, etc.</li> </ul>
	1.4 Ask tutors to read silently and point out the important or distinctive features of the concepts in lesson 7,	<ul><li>1.4 Point out the important or distinctive features of the concepts in lesson 7, e.g.</li></ul>
	e.g. Agriculture	Agriculture

•	Principles guiding the validation of a test or examination Categories of validity of assessment. Factors that affect validity of assessment	<ul> <li>Principles guiding the validation of a test or examination</li> <li>Categories of validity of assessment.</li> <li>Factors that affect validity of assessment</li> </ul>
•	hnical: Processes Evaluation Assessment Characteristics of Medium business enterprise ne Economics: Building a test specification table.	<ul> <li>Technical:</li> <li>Assessment Evaluation process</li> <li>Characteristics of Medium business enterprise</li> <li>Home Economics:</li> <li>Building a test specification table.</li> </ul>
Visu • •	<i>specification table.</i> <i>Ial Arts:</i> Techniques of modelling, craving, casting, folding, trimming, joining / gluing, tying, knotting, etc. Processes of making Textile products Ideas development and preliminary design (emphasis should be place on human figures and colour work) Critiquing student teachers' art works.	<ul> <li>Visual Arts:</li> <li>Techniques of modelling, craving, casting, folding, trimming, joining / gluing, tying, knotting, etc.</li> <li>Processes of making Textile products</li> <li>Ideas development and preliminary design (emphasis should be place on human figures and colour work)</li> <li>Critiquing the student teachers' art works.</li> </ul>
in le	In pairs within their domains, ask tutors to discuss any relevant Previous knowledge (RPK) of student teachers that will serve as a catalyst for effective learning of the lesson 7, e.g. esson 6, student chers studied:	<ul> <li>1.5 In pairs, within their domains, ask tutors to discuss any relevant Previous knowledge (RPK) of student teachers that will serve as a catalyst for effective learning of the lesson 7, e.g.</li> <li>In lesson 6, student teachers studied:</li> </ul>

2. Concept	<ul> <li>Test Reliability.</li> <li>Test Reliability and validity.</li> <li>The Role of Continuous Assessment.</li> <li>Preparing marking scheme.</li> <li>Thinking and exploring ideas for making Picture Making/Graphic Design/Textile Design</li> <li>These will serve as RPK for this lesson.</li> <li>1.6 Ask tutors to outline any possible challenging areas in lessons that may require clarification, e.g.</li> <li>Construction of test specification table.</li> <li>Assessing of practical activities conducted at workshop in TVET domains.</li> <li>Procedure for critiquing or peerreviewing student teachers' practical/art works.</li> <li>Scoring practical/art works.</li> <li>Scoring practical/art works.</li> <li>Scoring student teachers practical work may kill creativity)</li> <li>2.1 Lead tutors to discuss</li> </ul>	<ul> <li>activities conducted at workshop in TVET domains.</li> <li>Procedure for critiquing or peer- reviewing student teachers' practical/art works.</li> <li>Scoring practical/art works. (Poor scoring</li> </ul>	15 mins
Development (New learning likely to arise in lesson/s): Identification and discussion of new	<ul> <li>the new concepts in lesson 7, e.g.</li> <li>i. Types of Validity in Testing <ul> <li>Construct validity:</li> <li>Does the test</li> <li>measure the concept</li> </ul> </li> </ul>	<ul> <li>concept(s) in lesson 7, e.g.</li> <li>i. Types of Validity in Testing</li> <li>Construct validity: Does the test measure the</li> </ul>	

		account that it is	٦
learning,	that it is intended to	concept that it is	
potential barriers	measure?	intended to measure?	
to learning for	Content validity: Is	Content validity: Is the	
student teachers	the test fully	test fully representative	
or students,	representative of	of what it aims to	
concepts or	what it aims to	measure? etc.	
pedagogy being	measure? etc.		
introduced in the	ii. Processes of Assessment	ii. Processes of Assessment	
lesson, which	Evaluation	Evaluation	
need to be	Evaluation	Evaluation	
explored with the	phases: planning,	phases: planning,	
SL/HoD	implementation,	implementation,	
NB The guidance for	completion and	completion and	
SL/HoD should set	reporting	reporting	
out what they need	iii. Construction of test	iii. Construction of test	
to do to introduce	specification table.	specification table.	
and explain the	Use the revised Bloom	Use the revised Bloom	
issues/s with tutors	taxonomy of educational	taxonomy of educational	
	objectives to construct	objectives to construct	
	the test items because	the test items because	
	the curriculum was	the curriculum was	
	written based on it. The	written based on it. The	
	revised taxonomy use	revised taxonomy use	
	verb instead of nouns.	verb instead of nouns.	
	1956 Evaluation Synthesis Application Comprehension Knowledge Noun to Verb Form Retrieved 222/02/2021	1956 Evaluation Synthesis Analysis Analysis Analysis Analysis Analysis Analysis Noun to Verb Form Retrieved 222/02/2021	
	iv. The Chemical textile	iv. The Chemical textile	
	manufacturing	manufacturing	
	processes: sizing,	processes: sizing,	
	desizing, scouring,	desizing, scouring,	
	bleaching,	bleaching,	
	mercerization, dyeing,	mercerization, dyeing,	
	printing, special	printing, special	
	chemical finishing, etc.	chemical finishing, etc.	
	2.2 Ask tutors to discuss	2.2 Discuss possible	
	possible misconceptions	misconceptions and	
	and potential barriers in	potential barriers in	
	teaching/learning of	teaching/learning	
	Lesson 7, e.g.	Lesson 7, e.g.	

	<ul> <li>Possible hearing fatigue on the side of student teachers who have been hearing about assessment for the past 6 weeks</li> <li>Visual Art students may be deeply involved in their practical work and may be obstructed from paying attention to theoretical presentations, etc.</li> <li>Student teachers' apprehension towards class jury (Critiquing).</li> <li>Solution</li> <li>Tutor uses interactive method of delivery to reduce fatigue, or,</li> <li>Employ innovative teaching/learning such as 'Cross over learning' to enhance students interest.</li> <li>Critiquing should be a balanced discussion and evaluation of the strengths, weakness and notable features for improvement. Base discussion on specific criteria.</li> </ul>	<ul> <li>Possible hearing fatigue on the side of student teachers who have been hearing about assessment for the past 6 weeks</li> <li>Visual Art students may be deeply involved in their practical work and may be obstructed from paying attention to theoretical presentations, etc.</li> <li>Student teachers' apprehension towards class jury (Critiquing).</li> <li>Solution</li> <li>Tutor uses interactive method of delivery to reduce fatigue, or,</li> <li>Employ innovative teaching/learning such as 'Cross over learning' to enhance students interest.</li> <li>Critiquing should be a balanced discussion and evaluation of the strengths, weakness and notable features for improvement. Base discussion on specific criteria.</li> </ul>	
<ul> <li>3. Planning for teaching, learning and assessment activities for the lesson/s</li> <li>Reading and discussion of the teaching and learning activities</li> </ul>	<ul> <li>3.1 Ask tutors to list the new pedagogies or approaches to be introduce the lesson 7 NTS j,</li> <li>e.g. face to face,</li> <li>demonstration, simulation,</li> <li>community walk, group work, etc.</li> </ul>	3.1 List the new pedagogies or approaches to be introduce the lesson 7	40 mins
<ul> <li>Noting and addressing areas where tutors may</li> </ul>	3.2 Ask tutors to discuss the pedagogies /strategies or activities	3.2 Discuss the pedagogies/strategies or activities for	

	Γ	
require	for teaching/learning	teaching/learning of
clarification	of lesson 7 in various	lesson 7 in various TVET
<ul> <li>Noting</li> </ul>	TVET domains,	domains, e.g.
opportunities for	e.g.	Face-to-face
making links to	Face-to-face	Group discussions
the Basic School	Group discussions	Pair work or
Curriculum	<ul> <li>Pair work or</li> </ul>	independent study,
Noting	independent study,	
opportunities for	-	Demonstration of
integrating: GESI	Demonstration of	practical activities using
	practical activities using	real objects.
responsiveness	real objects.	
and ICT and 21 <sup>st</sup> C		
skills	3.3 Ask tutors to identify	3.3 Identify and discuss the
<ul> <li>Reading,</li> </ul>	and discuss areas that	areas that require
discussion, and	require clarifications, e.g.	clarification.
identification of	• Face-to-face: this	• Face-to-face: this
continuous	was what was	was what was
assessment	provided for in the	provided for in the
opportunities in	manual but	manual but
the lesson. Each	alternative	alternative
lesson should		arrangements should
include at least	arrangements should be made to deliver	be made to deliver
two		
opportunities to	the lesson virtually if	the lesson virtually if
use continuous	the need arises.	the need arises.
assessment to	• Tutor should engage	Tutor should engage
support student	student teachers in	student teachers in
teacher learning	hand-on –activities	hand-on –activities
Resources:	to facilitate	to facilitate
<ul> <li>Inks to the</li> </ul>	acquisition of skills	acquisition of skills
	and understanding of	and understanding of
existing PD	processes,	processes,
Themes, for	procedures, etc.	procedures, etc.
example,		
action	3.4 Using think-pair-share,	3.4 Discuss the assessment
research,	ask tutors to discuss the	opportunities in the
questioning	assessment	lessons and how they
and to other	opportunities in lesson	are aligned with NTEAP,
external	7 and how they are	e.g
reference	aligned with NTEAP.	Assessment as / for
material:	Refer to session 1 for	learning.
literature, on	summary of NTEAP	
web, Utube,		
physical	3.5 Ask tutors to suggest	3.5 Suggest any other
resources,	other assessment	assessment opportunity
power point;	opportunity they could	you can use to enhance
how they	use to enhance student	student teachers'
should be		
	teachers' understanding	understanding during

used. Consideration needs to be given to local availability o guidance on any power point presentations, TLM or other resources which need to be developed to support learning	<ul> <li>during the lesson delivery and subsequent application during their STS, e.g.</li> <li>Muddiest Point assessment (It is a quick monitoring technique in which students are asked to take a few minutes to write down the most difficult or confusing part of a lesson), etc.</li> <li>3.6 Ask tutors discuss how</li> </ul>	<ul> <li>the lesson delivery and subsequent application during their STS,</li> <li>Muddiest Point assessment (It is a quick monitoring technique in which students are asked to take a few minutes to write down the most difficult or confusing part of a lesson), etc.</li> <li>36 Discuss how you will use</li> </ul>
<ul> <li>Tutors should be expected to have a plan for the next lesson for student teachers</li> </ul>	<ul> <li>b) Ask tutors discuss now they will use assessment opportunities in the lesson to support student teachers during their STS sessions, e.g.</li> <li>Tutor will use assessment for/as learning opportunities to assist student teachers to assess learners at JHS and provide quick feedback for improvement.</li> </ul>	<ul> <li>assessment</li> <li>opportunities in the</li> <li>lesson to support</li> <li>student teachers during</li> <li>their STS sessions, e.g.</li> <li>Assist student</li> <li>teachers to apply</li> <li>assessment for/as</li> <li>learning to assess</li> <li>learners at JHS</li> <li>classroom and</li> <li>provide quick</li> <li>feedback for</li> <li>improvement.</li> </ul>
	<ul> <li>3.7 Lead tutors to point out possible GESI issues in relation to the lessons 7, e.g.</li> <li>Address the question of giving student teachers with SEN more time and space to accomplish the same level of task given to all others</li> <li>Address the question of using assessment to encourage student teachers who 'cross carpet' to do either male or female</li> </ul>	<ul> <li>3.7 Point out possible GESI issues in relation to the lesson 7.</li> <li>e.g.</li> <li>Address the question of giving student teachers with SEN more time and space to accomplish the same level of task given to all others</li> <li>Address the question of using assessment to encourage student teachers who 'cross carpet' to do either male or female</li> </ul>

dominated	dominated	
programmes, etc.	programmes, etc.	
Solution:	Solution:	
Ensure every student	Ensure every student	
teacher has adequate time	teacher has adequate time	
and space to develop	and space to develop	
themselves	themselves	
110111301103		
3.8 Ask tutors to list ICT and	3.8 List ICT and 21 <sup>st</sup> C skills	
21 <sup>st</sup> C skills that can be	that can be integrated in	
integrated in the lesson,	the lesson, e.g.	
e.g.		
• Encourage student	Encourage student	
teachers to use ICT	teachers to use ICT	
tools to make	tools to make	
designs.	designs.	
• They should also be	• They should also be	
encouraged to surf	encouraged to surf	
the internet for the	the internet for the	
characteristics of	characteristics of	
medium business	medium business	
enterprises	enterprises	
• Tutor uses	• Tutor uses	
appropriate ICT tools	appropriate ICT tools	
such as Google	such as Google	
Forms, and other	Forms, and other	
relevant applications	relevant applications	
to teach and	to teach and	
assessment tool.	assessment tool.	
3.9 Ask tutors to suggest	3.9 Suggest criteria/	
criteria/procedure for	procedure for	
assessing various	assessing various	
practical activities in	practical activities in	
TVET (in the workshop,	TVET (in the	
studio or on the field,	workshop, studio or	
e.g.	on the field), e.g.	
Agriculture (field work/	Agriculture (Field	
experiments)	work/experiment	
i. <i>Topic:</i>	i. Topic:	
-identification	-identification/	
/statement of	statement of	
Problem	Problem	
ii. Assemblage of tools	ii. Assemblage of tools	
and Materials	and Materials	
needed	needed	
	needed	

iii. Set-ups (drawings	iii. Set-ups (drawings	
including biological	including biological	
drawings if	drawings if	
applicable)	applicable)	
iv. Precautions (safety	iv. Precautions (safety	
rules)	rules)	
v. Methodology	v. Methodology	
(reliability/validity,	(reliability/validity,	
etc.)	etc.)	
vi. Result	vi. Result	
(observations,	(observations,	
findings,	findings,	
conclusions)	conclusions)	
NB.	NB.	
Agricultural drawings must	Agricultural drawings must	
be bold and clearly labelled	be bold and clearly labelled	
with arrows aligned	with arrows aligned	
horizontally not vertically.	horizontally not vertically.	
Home Economics	Home Economics	
Foods	Foods	
i. selection of	i. selection of	
appropriate dish(es)	appropriate dish(es)	
ii. Assemblage of	ii. Assemblage of	
appropriate	appropriate	
ingredients/materials	materials, tools and	
, tools and equipment	equipment	
iii. Method: i.e.	iii. Method: i.e.	
appropriateness of	appropriateness of	
procedures and	procedures and	
processes	processes	
iv. Table setting (design/	iv. Table setting (design/	
garnishing)	garnishing)	
v. Suitability (taste)	v. Suitability (taste)	
Clothing	Clothing	
i. Designing	i. Designing	
(interpretation of	(interpretation of	
the	the	
Problem/question,		
	Problem/question,	
sketches/patterns,	sketches/patterns,	
etc.)	etc.)	
ii. Appropriate use of	ii. Appropriate use of	
materials, tools and	materials, tools and	
equipment	equipment	
iii. Selection of	iii. Selection of	
appropriate Sewing	appropriate Sewing	
Processes (Seams)	Processes (Seams)	

<ul> <li>iv. Exhibition/ modelling of finished Product (Suitability)</li> <li>Technical/Visual Art         <ul> <li>Draftmanship/crafts manship:</li> <li>Design (appropriate interpretation of problem or question leading to idea development and preliminary drawings),</li> <li>fidelity of the production procedure and processes</li> <li>Mastery/accuracy/ efficiency in manipulative skills,</li> <li>proportionality,</li> <li>finishing techniques and finishes, etc.).</li> </ul> </li> <li>iv. Exhibition/ modelling of finished Product (Suitability)</li> <li>iv. Exhibition/ modelling of finished Product (Suitability)</li> <li>Technical/Visual Art             <ul> <li>Draftmanship / craftsmanship:</li> <li>Design (appropriate interpretation of problem or question leading to idea development and processes</li> <li>Mastery/accuracy/ efficiency in manipulative skills,</li> <li>proportionality,</li> <li>finishing techniques and finishes, etc.).</li> </ul> </li> </ul>
Product (Suitability)Product (Suitability)Technical/Visual Art i. Draftmanship/crafts manship: - Design (appropriate interpretation of problem or question leading to idea development and preliminary drawings),Technical/Visual Art i. Draftmanship/ craftsmanship: - Design (appropriate interpretation of problem or question leading to idea development and preliminary drawings),Technical/Visual Art i. Draftmanship/ craftsmanship: - Design (appropriate interpretation of problem or question leading to idea development and preliminary drawings),- fidelity of the production procedure and processes - Mastery/accuracy/ efficiency in manipulative skills, - proportionality, - finishing techniques and finishes, etc.).Mastery/accuracy/ efficiency in manipulative skills, - proportionality, - finishing techniques and finishes, etc.).
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Technical/Visual ArtTechnical/Visual Arti. Draftmanship/crafts manship:- Design (appropriate interpretation of problem or question leading to idea development and preliminary drawings),- Design (appropriate interpretation of problem or question leading to idea development and preliminary drawings),- Design (appropriate interpretation of problem or question leading to idea development and preliminary drawings),- fidelity of the production procedure and processes- fidelity of the production procedure and processes- Mastery/accuracy/ efficiency in manipulative skills, - proportionality, - finishing techniques and finishes, etc.) Technical/Visual Art i. Draftmanship / craftsmanship: - Design (appropriate interpretation of problem or question leading to idea development and proluction procedure and processes
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<ul> <li>Design (appropriate interpretation of problem or question leading to idea</li> <li>development and preliminary</li> <li>fidelity of the production</li> <li>procedure and processes</li> <li>Mastery/accuracy/ efficiency in manipulative skills,</li> <li>proportionality,</li> <li>finishing techniques and finishes, etc.).</li> <li>Design (appropriate interpretation of problem or question problem or question leading to idea</li> <li>development and development and development and proluction</li> <li>drawings),</li> <li>fidelity of the production</li> <li>procedure and processes</li> <li>Mastery/accuracy/ efficiency in manipulative skills,</li> <li>proportionality,</li> <li>finishing techniques and finishes, etc.).</li> </ul>
interpretation of problem or question leading to idea development and preliminary drawings),interpretation of problem or question leading to idea development and preliminary drawings),- fidelity of the production procedure and processes- fidelity of the processes- Mastery/accuracy/ efficiency in manipulative skills, - proportionality, - finishing techniques and finishes, etc.) meterpretation of problem or question problem or question leading to idea development and development and development and development and preliminary preliminary drawings),
problem or question leading to idea development and preliminary drawings),problem or question leading to idea development and preliminary drawings),- fidelity of the production procedure and processes- fidelity of the production procedure and processes- Mastery/accuracy/ efficiency in manipulative skills, - proportionality, - finishing techniques and finishes, etc.).problem or question leading to idea development and development and preliminary drawings),
leading to idealeading to ideadevelopment anddevelopment andpreliminarypreliminarydrawings),drawings),- fidelity of the- fidelity of theproductionprocedure andprocessesprocesses- Mastery/accuracy/efficiency inefficiency inefficiency inmanipulative skills,proportionality,- finishing techniquesand finishes, etc.).
development and preliminary drawings),development and preliminary drawings),- fidelity of the production procedure and processes- fidelity of the production procedure and processes- Mastery/accuracy/ efficiency in manipulative skills, - proportionality, - finishing techniques and finishes, etc.) manipulative skills - finishing techniques and finishes, etc.).
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drawings),drawings),- fidelity of the production procedure and processes- fidelity of the production procedure and processes- Mastery/accuracy/ efficiency in manipulative skills, - proportionality, - finishing techniques and finishes, etc.) Maswings), - finishing techniques and finishes, etc.).
<ul> <li>fidelity of the production procedure and processes</li> <li>Mastery/accuracy/ efficiency in manipulative skills,</li> <li>proportionality,</li> <li>finishing techniques and finishes, etc.).</li> </ul>
<ul> <li>fidelity of the production procedure and processes</li> <li>Mastery/accuracy/ efficiency in manipulative skills,</li> <li>proportionality,</li> <li>finishing techniques and finishes, etc.).</li> </ul>
productionproductionprocedure andprocedure andprocessesprocesses- Mastery/accuracy/- Mastery/accuracy/efficiency inefficiency inmanipulative skills,manipulative skills,- proportionality,- proportionality,- finishing techniques- finishing techniquesand finishes, etc.).and finishes, etc.).
procedure and processesprocedure and processes- Mastery/accuracy/ efficiency in manipulative skills, - proportionality, - finishing techniques and finishes, etc.) Mastery/accuracy efficiency and manipulative skills, - proportionality, - finishing techniques and finishes, etc.).
processesprocesses- Mastery/accuracy/ efficiency in manipulative skills, - proportionality, - finishing techniques and finishes, etc.) Mastery/accuracy/ efficiency in manipulative skills, - proportionality, - finishing techniques and finishes, etc.).
<ul> <li>Mastery/accuracy/ efficiency in manipulative skills,</li> <li>proportionality,</li> <li>finishing techniques and finishes, etc.).</li> <li>Mastery/accuracy/ efficiency in manipulative skills,</li> <li>proportionality,</li> <li>finishing techniques</li> <li>and finishes, etc.).</li> </ul>
efficiency in manipulative skills, - proportionality, - finishing techniques and finishes, etc.).efficiency in manipulative skills, - proportionality, - finishing techniques and finishes, etc.).
manipulative skills,manipulative skills,- proportionality,- proportionality,- finishing techniques- finishing techniquesand finishes, etc.).and finishes, etc.).
<ul> <li>proportionality,</li> <li>finishing techniques</li> <li>and finishes, etc.).</li> <li>proportionality,</li> <li>proportionality,</li> <li>finishing techniques</li> </ul>
<ul> <li>finishing techniques</li> <li>finishing techniques</li> <li>and finishes, etc.).</li> <li>and finishes, etc.).</li> </ul>
and finishes, etc.). and finishes, etc.).
ii. Use of Colour and ii. Use of Colour and
tone (for colour tone (for colour
based works) based works)
complementary/ complementary/
analogous/tints/shad analogous/tints/shad
es/symbolisms, etc. es/symbolisms, etc.
iii. Appropriate use of iii. Appropriate use of
tools and materials tools and materials
iv. Originality, creativity iv. Originality, creativity
including preliminary including preliminary
sketches and sketches and
research) research)
v. Suitability: i.e. v. Suitability: i.e.
functionability functionability
/marketability of /marketability of
product product
3.10 Lead tutors list the 3.10 List the needed
needed resources resources for teaching
for the teaching and learning of the
and learning of the concepts in lesson 7.
concepts in lesson
7, e. <i>g</i> . smart

	boards, studio, Braille, Scanner and Embosser Sign language, YouTube Design studio, Internet facility, laptop/ computer/PCs, JHS Career Technology curriculum.		
<ul> <li>Evaluation and review of session:</li> <li>Tutors should Identifying critical friends to observe lessons and report at</li> </ul>	<ul> <li>4.3 Ask each tutors to name one critical friend to observe their lesson and report outcome at the next PD session.</li> <li>4.4 Allow questions on any outstanding issues</li> </ul>	<ul> <li>4.3 Name a critical friend to observe your lesson and report outcome at the next PD session.</li> <li>4.4 Any outstanding issues in lesson 7 that needs</li> </ul>	15 mins
<ul> <li>next session.</li> <li>Identifying and addressing any outstanding issues relating to the lesson/s for clarification</li> </ul>	relating to lesson 7 that need clarification. Note: Refer any outstanding issue to the HOD or SWL.	clarification.	
	4.3 Ask tutors to read the course manuals in preparation for PD session 8.	4.3 Read the course manuals in preparation for PD session 8.	

## Tutor PD Session for Lesson 8 in the Course Manual

Focus: the bullet points provide the frame for what is to be done in the session. The SWL should use the bullets to guide what they write for the SL/HoD and tutors to do and say during each session. Each bullet needs to be addressed and specific reference should be made to the course manual/s.	Guidance notes on Leading the session. What the SL/HoDs will have to say during each stage of the session	Guidance Notes on Tutor Activity during the PD Session. What PD Session participants (Tutors) will do during each stage of the session.	Time in session
<ol> <li>Introduction to the session</li> <li>Review prior learning</li> <li>A critical friend</li> </ol>	<ul><li>1.1. Use an ice breaker to start the session: e.g. Ask tutors to illustrate on A4 sheet how they feel today.</li></ul>	<ol> <li>1.1. Revision Activity: Illustrate how you are feeling today</li> </ol>	20 mins
<ul> <li>to share findings for a short discussion and lessons learned</li> <li>Reading and discussion of the introductory sections of the</li> </ul>	<ul> <li>1.2. Ask the critical friend to share his/ her observations and challenges encountered in the previous week's lesson delivery.</li> </ul>	1.2 Share your observations and challenges encountered in the previous week's lesson delivery.	
<ul> <li>lesson up to and including learning outcomes and indicators</li> <li>Overview of</li> </ul>	<ol> <li>Allow for short discussion on lessons learned from critical friend's findings.</li> </ol>	1.3 Discuss any new lessons learned from critical friend's findings.	
content and identification of any distinctive aspects of the lesson/s, NB The guidance for SL/HoD should identify and address	1.4 <u>Ask tutors to tell how</u> <u>students will be</u> <u>prepared to employ</u> <u>relevant teaching,</u> <u>learning and</u> <u>assessment strategies</u> <u>during the basic school</u> <u>classroom work in STS</u>	1.4 <u>Tell how students will</u> <u>be prepared to employ</u> <u>relevant teaching,</u> <u>learning and assessment</u> <u>strategies during the</u> <u>basic school classroom</u> <u>work in STS in year 4</u> <u>semester 1.</u>	

	in	
any areas where	in year 4 semester 1.	
tutors All might	(Collect a few examples	
require clarification	for discussion)	
on any aspect of the		1.5. Decidiorated discusse
lesson.	1.5 Ask tutors to read and	1.5 Read and discuss
NB SL/HoD should	discuss introductory	introductory sections of
ask tutors to plan for	sections of the lessons	the lessons and
their teaching as	including learning	including learning
they go through the	outcomes and	outcomes and
PD session	indicators.	indicators.
	1.6 Ask tutors to identify	1.6. Identify important or
	important or distinctive	distinctive features of
	features of lesson 8, e.g.	lesson 8, e.g.
	the TVET domains are	All the TVET domains are
	continuing their discussions	continuing their discussions
	on Assessment as a built-up	on Assessment as a built-up
	on lesson 7. While lesson 7	on lesson 7. While lesson 7
	in Agriculture and Home	in Agriculture and Home
	Economics was focused on	Economics was focused on
	Planning Classroom tests	Planning Classroom tests
	and Assessment, Technical	and Assessment, Technical
	and Visual Art concentrated	and Visual Art concentrated
	on how to mark (score)	on how to mark Practical
	Practical works. Thus lesson	works. Thus lesson 8 is a
	8 is a logical follow up of	logical follow up of lesson 7.
	lesson 7.	
	Refer to topics in lesson 8	Refer to topics in lesson 8
	below.	below.
		below.
	Agriculture:	Agriculture:
	Types of test	Types of test
	(Multiple-choice and	(Multiple-choice and
	True or False	True or False
	Objective Test).	Objective Test).
	Home Economics:	Home Economics:
	Types of Tests-	Types of Tests-
	Multiple choice and	Multiple choice and
	Alternative (True/	Alternative (True/
	False) Tests.	False) Tests.
	Technical:	Technical:
	Assessment of	Assessment of
	Classroom Teaching	Classroom Teaching
	for Education.	for Education.

	<ul> <li>Identify business</li> </ul>	<ul> <li>Identify business</li> </ul>
	ideas in Technical	ideas in Technical
	<ul> <li>Legal forms of</li> </ul>	<ul> <li>Legal forms of</li> </ul>
	businesses in Ghana	businesses in Ghana
	Visual Arts:	Visual Arts:
	<ul> <li>Assessing Practical</li> </ul>	<ul> <li>Assessing Practical</li> </ul>
	Works in Visual Art	Works in Visual Art
	(Appreciation and	(Appreciation and
	Criticism).	Criticism).
	<ul> <li>Planning and Making</li> </ul>	Planning and Making
	Graphic Design,	Graphic Design,
	Picture Making, and	Picture Making, and
	Textile Design items.	Textile Design items.
	1.7 Ask tutors to identify	1.7 Identify any prior
	any prior knowledge of	knowledge of student
	student teachers that	teachers that will
	will facilitate effective	facilitate effective
	learning of the lesson,	learning of the lesson,
	Refer 1.5 above. NB:	Refer 1.5 above
	Remind tutors to draw	Remember to draw student
	student teachers attention	teachers' attention to this
	to this contextual	contextual placement of
	placement of lesson 8 for	lesson 8 for linkage with
	linkage with RPK.	RPK.
	1.8. Ask tutors to identify	1.8 Is there any aspect of
	any aspect of the	lesson 8 that should be
	lesson that may	clarified?
	require clarification,	
	e.g.	
	• Some student	Some student
	teachers may not	teachers may not
	understand the	understand the
	advantages and	advantages and
	disadvantages of the	disadvantages of the
	various types of	various types of
	tests.	tests.
	<ul> <li>Some others too</li> </ul>	Some others too
	may have difficulty	may have difficulty
	in understanding	in understanding
	other authentic	other authentic
	assessment	assessment
	methous, like	Inethous. like
	methods, like Concept Mapping,	methods, like Concept Mapping,

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	<ul> <li>Some visual art students too may have difficulty in enduring the scrutiny during jury sessions because of the appreciation and criticism processes,</li> <li>Some others may also have challenges grasping the production procedures and processes, etc.</li> <li>Tutor guides student teacher through practical processes to discover the advantages and disadvantages of the various forms of tests</li> <li>Tutor models authentic assessment practices for student teachers to see in class</li> <li>Tutor uses more positive reinforcement to motivate student teachers during jury sessions</li> <li>Tutor uses demonstration, concept maps and</li> </ul>	<ul> <li>Some visual art students too may have difficulty in enduring the scrutiny during jury sessions because of the appreciation and criticism processes,</li> <li>Some others may also have challenges grasping the production procedures and processes, etc.</li> <li>Solution:         <ul> <li>Tutor guides student teacher through practical processes to discover the advantages and disadvantages of the various forms of tests</li> <li>Tutor models authentic assessment practices for student teachers to see in class</li> <li>Tutor uses more positive reinforcement to motivate student teachers during jury sessions</li> <li>Tutor uses demonstration, concept maps and</li> </ul> </li> </ul>
	<ul> <li>class</li> <li>Tutor uses more positive reinforcement to motivate student teachers during jury sessions</li> <li>Tutor uses demonstration,</li> </ul>	<ul> <li>class</li> <li>Tutor uses more positive reinforcement to motivate student teachers during jury sessions</li> <li>Tutor uses demonstration,</li> </ul>

2. Concept	2.1 Ask tutors in their buzz	2.1. In your buzz groups to	15 mins
Development	groups to read through	read through the main	13 111113
(New learning	the main lesson in the	lesson in their various	
likely to arise in	manual and make a list	manuals and make a	
lesson/s):	of the new learning in	list of the new learning	
Identification and	lesson 8, e.g.	in lesson 8, e.g.	
discussion of new			
learning,	Agriculture:	Agriculture:	
potential barriers	Knowledge on how	Knowledge on how	
to learning for	to set objective test.	to set objective test.	
student teachers			
or students,	Home Economics:	Home Economics:	
concepts or	Types of objective	Types of objective	
pedagogy being	test.	test.	
introduced in the			
	Tachaical	Tachnical	
lesson, which	Technical:	Technical:	
need to be	Continuous	Continuous	
explored with the	Assessment and	Assessment and	
SL/HoD	general Principles of	general Principles of	
NB The guidance for	Classroom tests as	Classroom tests as	
SL/HoD should set	well as how to	well as how to	
out what they need	prepare marking	prepare marking	
to do to introduce	scheme.	scheme.	
and explain the			
issues/s with tutors.	Visual Art:	Visual Art:	
	Understanding of	Understanding of	
	Appreciation and	Appreciation and	
	Criticism in Visual	Criticism in Visual	
	Art.	Art.	
	Some foundational	Some foundational	
	,	-	
	skills, techniques,	skills, techniques,	
	tools, materials and	tools, materials and	
	processes in Graphic	processes in Graphic	
	Design/ Picture	Design/ Picture	
	Makin/Textiles	Makin/Textiles	
	Design.	Design.	
	2.3. Ask tutors to identify,	2.3. Discuss any potential	
	discuss and suggest	misconceptions and	
	possible solutions for	barriers with respect to	
	any potential	the concepts listed in	
	misconceptions and	2.2 above.	
	barriers to the learning		
	of the concepts listed in		
	2.2 above, e.g.		
	NB: some of the	NB: some of the	
	misconceptions and barriers	misconceptions and barriers	
			<u> </u>

related to the concepts may	related to the concepts may
include:	include:
<ul> <li>Some student</li> </ul>	Some student
teachers may not see	teachers may not see
any advantages of	any advantages of
tests because of the	tests because of the
fear of it.	fear of it.
• Some others too may	<ul> <li>Some others too may</li> </ul>
have difficulty in	have difficulty in
understanding other	understanding other
authentic assessment	authentic assessment
methods, like	methods, like
Concept Mapping,	Concept Mapping,
<ul> <li>Some visual art</li> </ul>	<ul> <li>Some visual art</li> </ul>
students too may	students too may
have difficulty in	have difficulty in
enduring the scrutiny	enduring the scrutiny
during jury sessions	during jury sessions
because of the	because of the
-	_
appreciation and	appreciation and
criticism processes,	criticism processes,
• Some others may also	Some others may also
have challenges	have challenges
grasping the	grasping the
production	production
procedures and	procedures and
processes, etc.	processes, etc.
Solution:	Solution:
<ul> <li>Tutor guides student</li> </ul>	<ul> <li>Tutor guides student</li> </ul>
teacher through	teacher through
practical processes to	practical processes to
discover the	discover the
advantages and	advantages and
disadvantages of the	disadvantages of the
various forms of tests	various forms of tests
Tutor models	Tutor models
authentic assessment	authentic assessment
practices for student	practices for student
teachers to see in	teachers to see in
class	class
• Tutor uses more	Tutor uses more
positive	positive
reinforcement to	reinforcement to
motivate student	motivate student
teachers during jury	teachers during jury
sessions	sessions
363310113	363310113

r			1 1
	<ul> <li>Tutor uses demonstration, concept maps and simulation, hands-on activities to help student teachers understand production procedures and processes, etc.</li> </ul>	<ul> <li>Tutor uses demonstration, concept maps and simulation, hands-on activities to help student teachers understand production procedure</li> </ul>	
<ul> <li>3. Planning for teaching, learning and assessment activities for the lesson/s</li> <li>Reading and discussion of the teaching and</li> </ul>	<ul> <li>3.1. Lead tutors to read and discuss the teaching and learning activities in the course manuals, e.g.</li> <li>face to face, discussion, demonstration, hands-on activity, group and independent studies</li> </ul>	3.1. Read and discuss the teaching and learning activities in the course manuals for the various groups, e.g. face to face, discussion, demonstration, hands-on activity, group and independent studies	40 mins
<ul> <li>teaching and learning activities</li> <li>Noting and addressing areas where tutors may require clarification</li> <li>Noting opportunities for making links to the Basic School Curriculum</li> <li>Noting opportunities for integrating: GESI responsiveness and ICT and 21<sup>st</sup> C skills</li> <li>Reading, discussion, and identification of continuous assessment opportunities in the lesson. Each lesson should include at least</li> </ul>	<ul> <li>independent studies</li> <li>3.2 Ask tutors to identify areas that need clarification, e.g.</li> <li>Some tutors may be torn between teaching the theories of tests and engaging student teachers on hands-on-test item construction and administration with their related activities.</li> <li>Some may be equally uncertain about the readiness of student teachers to understand the nitty- gritties of test construction and administration</li> <li>A believe that some particular tribe or people can create business, etc.</li> </ul>	<ul> <li>independent studies</li> <li>3.2 Identify areas that need clarification.</li> <li>Some tutors may be torn between teaching the theories of tests and engaging student teachers on hands-on-test item construction and administration with their related activities.</li> <li>Some may be equally uncertain about the readiness of student teachers to understand the nitty-gritties of test construction and administration</li> <li>Some particular tribe or people can create business, etc.</li> </ul>	

	opportunities to	Solution	Solution
	use continuous	• Tutor combines	Tutor combines
	assessment to	theories and practical	theories and practical
	support student	activity to enhance	activity to enhance
	teacher learning	the understanding of	the understanding of
•	Resources:	how the concepts of	how the concepts of
	<ul> <li>Links to the</li> </ul>	tests work in the	tests work in the
	existing PD	classroom situation.	classroom situation.
	Themes, for		
	example,	3.3 Lead tutors to discuss in	3.3 Discuss in your buzz
	action	their buzz groups how	groups how you intend
	research,	<b>-</b> .	to deliver on the
	,	they intend to deliver on	
	questioning	the activities suggested	activities suggested in
	and to other	in the manual to achieve	the manual to achieve
	external	the Los and the LIs in	the Los and the LIs in
	reference	lesson 8, e.g.	lesson 8.
	material:	discussions, demonstration,	discussions, demonstration,
	literature, on	hands-on activity, group	hands-on activity, group
	web, Utube,	and independent, as	and independent, as
	physical	suggested in the manual	suggested in the manual
	resources,		
	power point;	3.4. Ask tutors to surf OERs	3.4 Surf OERs and other
	how they	and other internet	internet sources and
	should be	sources and suggest	suggest other possible
	used.	other possible ways	ways lesson 8 can be
	Consideratio	lesson 8 can be	delivered successfully,
	n needs to	delivered successfully,	e.g.
	be given to	e.g.	
	local	<ul> <li>Review of past exam</li> </ul>	<ul> <li>Review of past exam</li> </ul>
	availability	questions to see if	questions to see if
	<ul> <li>guidance on</li> </ul>	they satisfy the	they satisfy the
	any power	specifications of	specifications of
	point	validity and reliability	validity and reliability
	presentation	• Inviting resource	<ul> <li>Inviting resource</li> </ul>
	s, TLM or	persons from the	persons from the
	other	Exam unites in the	Exam unit of the
	resources	mentoring University	mentoring University
	which need	to interact with	to interact with
	to be	student teachers on	student teachers on
	developed to	test administration.	test administration.
	support	• Student teachers surf	• Student teachers surf
	learning	the internet to view	the internet to view
•	Tutors should be	product designs and	product designs and
	expected to have	production	production
	a plan for the	procedures and	procedures and
	next lesson for	processes	processes
	student teachers		,
L		l	1

<ul> <li>Student teachers surf the internet to generate business ideas and legal forms of businesses in Ghana</li> <li>3.4. Ask tutors to discuss how GESI issues related to the teaching and learning activities of the lesson would be</li> </ul>	<ul> <li>Student teachers surf the internet to generate business ideas and legal forms of businesses in Ghana</li> <li>3.4 Discuss how GESI issues related to the teaching /learning activities of the lesson 8 would be addressed.</li> </ul>	
<ul> <li>addressed e.g.</li> <li>Organize student teachers into mixed ability groups so they can support one another'</li> <li>Give all student teachers opportunity to develop their skills at their own pace.</li> </ul>	<ul> <li>Organize student teachers into mixed ability groups so they can support one another'</li> <li>Give all student teachers opportunity to develop their skills at their own pace.</li> </ul>	
<ul> <li>3.5. Ask tutors to identify any 21<sup>st</sup> century skills listed in the manuals and how they plan to apply them in lesson 8 to facilitate student teachers during their STS activities, e.g.</li> <li>The use of ICT to prepare and present lessons 8 as much as</li> </ul>	<ul> <li>3.5 Identify any 21<sup>st</sup> century skills listed in the manuals and how they plan to apply them in lesson 8 to facilitate student teachers during their STS activities, e.g.</li> <li>The use of ICT to prepare and present lessons 8 as much as</li> </ul>	
<ul> <li>it is possible.</li> <li>Development of collaborative skills through group works and presentations.</li> <li>Let student teachers surf the internet for more information as part of their independent study</li> <li>Tutors engage Student teachers on ICT platforms for</li> </ul>	<ul> <li>it is possible.</li> <li>Development of collaborative skills through group works and presentations.</li> <li>Let student teachers surf the internet for more information as part of their independent study</li> <li>Tutors engage Student teachers on ICT platforms for</li> </ul>	

Ι		
discussion and other	discussion and other	
academic	academic	
interactions, etc.	interactions, etc.	
3.6. Ask tutors to read the	3.6 Ask tutors to read the	
assessment activities in	assessment activities in	
the various manuals and	the various manuals and	
identify areas that	identify areas that	
require clarification, e.g.	require clarification,	
tutor/peer/self-	tutor/peer/self-	
assessment (assessment	assessment (assessment	
as, for) as provided for	as, for) as provided for in	
in the manual.	the manual.	
NB. These forms of	NB. These forms of	
assessment are useful in	assessment are useful in	
jury sessions.	jury sessions.	
Remind student teachers to	Remind student teachers to	
be completing their project	be completing their project	
works by now. Subject	works by now. Subject	
portfolios should also be	portfolios should also be	
nearing completion by now.	nearing completion now.	
nearing completion by now.	hearing completion now.	
3.7. Ask tutors to list the needed resources for teaching/learning the concepts in lesson 8, e.g. brushes, pencils, pens, paper, glue, colour (poster, gauche, acrylics, canvas yarns, looms, printing inks, dyes, donkey, easel, pallet knife, laptops, internet facilities, etc.	3.7. Identify the needed inclusive resources for teaching and learning of the concepts in both CoE and basic school classrooms. e.g. brushes, pencils, pens, paper, glue, colour (poster, gauche, acrylics, canvas yarns, looms, printing inks, dyes, donkey, easel, pallet knife, laptops, internet facilities, etc.	
3.8. Ensure that every member of the various groups have concrete plans for what teaching lesson 8.	3.8. Have concrete plans for teaching lesson 8	
NB: in the case of	NB: in the case of	
unresolved issues consult	unresolved issues consult	
the subject leads.	the subject leads.	

4. Evaluation and	4.1. Remind tutors to invite	4.1. Invitea critical friend to	15 mins
review of	a critical friend to	observe your lesson	
session:	observe their lessons	and give you feedback	
Tutors should	and give feedback in	for improvement.	
Identifying	the case of unresolved		
critical friends to	issues refer to the		
observe lessons	SWLs.		
and report at			
next session	NB: Critical friend may or		
<ul> <li>Identifying and</li> </ul>	may not be in your subject		
addressing any	specific areas.		
	specific dreds.		
outstanding	4.2. Ask tutors to	4.2 Individually write down	
issues relating to		4.2. Individually write down	
the lesson/s for	individually write down	two key ideas you are	
clarification	two key ideas they are	taking away from this	
	taking away from the	lesson.	
	session.		
	4.3. Clarify any unresolved	4.3. Read lesson 9 to	
	issues and remind	prepare for the next	
	tutors to read lesson 9	PDS.	
	in preparation for the		
	next PDS.		

## Tutor PD Session for Lesson 9 in the Course Manual

Focus: the bullet points provide the frame for what is to be done in the session. The SWL should use the bullets to guide what they write for the SL/HoD and tutors to do and say during each session. Each bullet needs to be addressed and specific reference should be made to the course manual/s.	Guidance notes on Leading the session. What the SL/HoDs will have to say during each stage of the session	Guidance Notes on Tutor Activity during the PD Session. What PD Session participants (Tutors) will do during each stage of the session.	Time in session
<ol> <li>Introduction to the session</li> <li>Review prior learning</li> <li>A critical friend to share findings for a short discussion and lessons learned</li> <li>Reading and discussion of the introductory sections of the lesson up to and including</li> </ol>	<ul> <li>1.1. Ask participants to reflect on what has been learnt in PD lesson (8) and report to the whole group how it influenced their teaching.</li> <li>1.2. Ask the critical friend (preferably, subject specialist) to report on his/her observation of the teaching of Lesson 8.</li> </ul>	<ul> <li>1.1. Reflect on what has been learnt in PD lesson (8) and report to the whole group how it influenced their teaching.</li> <li>1.2. Report your observation on the teaching of Lesson 8.</li> </ul>	20 mins
<ul> <li>learning         <ul> <li>outcomes and                 indicators</li> <li>Overview of                 content and                 identification of                 any distinctive                 aspects of the                 lesson/s,                 NB The guidance for                 SL/HoD should</li> </ul> </li> </ul>	1.3. <u>Ask tutors to tell how</u> <u>students will be</u> <u>prepared to employ</u> <u>relevant teaching,</u> <u>learning and assessment</u> <u>strategies during the</u> <u>basic school classroom</u> <u>work in STS in year 4</u> <u>semester 1. (Collect a</u> <u>few examples for</u> <u>discussion)</u>	1.3. T <u>ell how students will</u> <u>be prepared to employ</u> <u>relevant teaching,</u> <u>learning and</u> <u>assessment strategies</u> <u>during the basic school</u> <u>classroom work in STS</u> <u>in year 4 semester 1.</u>	

identify and address any areas where tutors might require clarification on any aspect of the lesson. NB SL/HOD should ask tutors to plan for their teaching as they go through the PD session	<ul> <li>1.4 Ask participants to read the introductory sections of Lesson 9 with special reference to <i>course</i> <i>learning outcomes and</i> <i>indicators</i> and discuss with subject base groups in TVET the important or distinctive aspects of the lesson 9.</li> <li>Process of naming a business.</li> <li>Business licensing registration process</li> <li><i>Refer to your respective</i> <i>TVET course manual</i>.</li> <li>1.5 Ask tutors to read the Overview of the content of lesson 9 and point out any distinctive aspects of the lesson.</li> <li><i>For example;</i> <i>Matching Test and</i> <i>Supply Type, Multiple</i> <i>Choice Question</i> <i>Jury, Peer and Tutor</i></li> </ul>	<ul> <li>1.4 Read the introductory sections of Lesson 9 with special reference <i>course learning</i> <i>outcomes and</i> <i>indicators</i> and discuss with subject base groups in TVET the important or distinctive aspects of the lesson 9.</li> <li>Process of naming a business.</li> <li>Business licensing registration process</li> <li>Process of naming a business.</li> <li>Business licensing registration process</li> <li>Process of naming a business.</li> <li>Business licensing registration process</li> <li>Refer to your respective TVET course manual.</li> <li>1.5. Read the Overview of the content of lesson 9 and point out any distinctive aspects of the lesson.</li> <li>For example; Matching Test and Supply Type, Multiple Choice Question</li> </ul>	
	Jury, Peer and Tutor assessment. Planning and Making Graphic Design item Planning and Making Pictures Planning and Making Textile products	Question Jury, Peer and Tutor assessment. Planning and Making Graphic Design item Planning and Making Pictures Planning and Making Textile products	
	1.6. Ask participants in their subject domains to identify and address any area of concern in lesson 9 in their	1.6 Identify and address any area of concern in lesson 4 in your respective TVET courses that needs clarification.	

r			
	respective TVET courses		
	that needs clarification.		
	For example:	For example:	
	Objective test	<ul> <li>Objective test</li> </ul>	
	promote guess and	promote guess and	
	'chew and pour'. It	'chew and pour'. It	
	may be solved by	may be solved by test	
	test item training	item training	
	workshop to enable	workshop for student	
	them set more	teachers to enable	
	application	them set more	
	questions.	application questions.	
	<ul> <li>Lack of resources</li> </ul>	<ul> <li>Lack of resources</li> </ul>	
	such as studios,	such as studios,	
	internet facilities	internet facilities	
	and tools in schools	and tools in schools	
	may be address by	may be address by	
	visiting workshops	visiting to	
	where these	workshops where	
	facilities are for	these facilities are	
	students to have		
		for students to have	
	firsthand experience	firsthand experience	
	with.	with.	
	<ul> <li>Many people find</li> </ul>	<ul> <li>Many people find</li> </ul>	
	Picture Making time	Picture Making time	
	-consuming and	-consuming and	
	time wasting. It may	time wasting may be	
	be solved by	solved by	
	encouraaina student	encouraging student	
	teachers to sell some	teachers to sell some	
	of their works.	of their works.	
2. Concept	2.1 Ask tutors in pairs (same	2.1. List and discuss the	15 mins
Development	course) to list and	new learning ideas or	10 11113
(New learning	discuss new	u u u u u u u u u u u u u u u u u u u	
•		concept in your various	
likely to arise in	learning/concepts in	TVET lesson courses.	
lesson/s):	lesson 9 in your TVET		
Identification and	e.g.		
discussion of new			
learning,	Agriculture		
potential barriers	<ul> <li>Types of test</li> </ul>		
to learning for	(Matching Test and		
student teachers	Supply Type)		
or students,			
concepts or	Home Economics		
pedagogy being			
hengenes henne		l	

introduced in the lesson, which need to be explored with the SL/HoD NB The guidance for SL/HoD should set out what they need to do to introduce and explain the issues/s with tutors	<ul> <li>Types of test - Matching Test and Supply Type</li> <li>Technical</li> <li>Assessment using Multiple Choice Question</li> <li>Process of naming a business.</li> <li>Business licensing registration process</li> </ul>	
	<ul> <li>Visual Art</li> <li>Jury, Peer and Tutor assessment/review in Assessment practices in Visual Art</li> <li>Planning and Making <i>Graphic Design</i> <i>items</i> Continued</li> <li>Planning and Making <i>Pictures</i> Continued:</li> <li>Planning and Making Textile products Continued:</li> </ul>	
	<ul> <li>2.2 Lead tutors to point out and discuss potential barriers to the teaching and learning of lesson 9, e.g.</li> <li>The semester is coming to a close and exam feelings are in the air. Student teachers may be more interested in questions that will be set for the end of semester not necessarily in new learning.</li> <li>Student teachers at</li> </ul>	<ul> <li>2.2. Point out and discuss potential barriers to the learning of lesson 9 for student teachers or students, e.g.</li> <li>The semester is coming to a close and exam feelings are in the air. Student teachers may be more interested in questions that will be set for the end of semester not necessarily in new learning.</li> <li>Student teachers at</li> </ul>

	tutors to teach to	tutors to teach to the	
	the examination not	examination not	
	necessarily for skill.	necessarily for skill.	
			40
3. Planning for	3.1. Ask tutors to read and	3.1. Read and discus the	40 mins
teaching,	discuss the teaching	teaching and learning	
learning and	and learning activities	activities in lesson 9.	
assessment	in lesson 9.		
activities for the	e.g. lesson 9 according to		
lesson/s	the manual is to be		
<ul> <li>Reading and</li> </ul>	delivered through:		
discussion of the	<ul> <li>face-to-face</li> </ul>	• <i>e.g.</i> face-to-face	
teaching and	interaction between	interaction between	
learning	the tutor and	the tutor and	
activities.	student teachers	student teachers	
<ul> <li>Noting and</li> </ul>	• using a variety of talk	• using a variety of talk	
addressing areas	for learning methods	for learning methods	
where tutors	E-learning using	E-learning using	
may require	smart phones and	smart phones and	
clarification.	laptops, etc.	laptops, etc.	
Noting	<ul> <li>discussion,</li> </ul>	<ul> <li>discussion,</li> </ul>	
opportunities for	,	,	
making links to	demonstration,	demonstration,	
the Basic School	<ul> <li>hands-on activity,</li> </ul>	<ul> <li>hands-on activity,</li> </ul>	
	group work and	group work and	
Curriculum	<ul> <li>independent studies</li> </ul>	<ul> <li>independent studies</li> </ul>	
Noting	These can be practicalize in	These can be practicalize in	
opportunities for	the classroom through a	the classroom through a	
integrating: GESI	number of activities	number of activities	
responsiveness	including the following:	including the following:	
and ICT and 21 <sup>st</sup> C	Student teachers	Student teachers	
skills	through interaction,	through interaction,	
<ul> <li>Reading,</li> </ul>	set samples	set samples	
discussion, and	multiple-choice and	multiple-choice and	
identification of	supply test items	supply test items	
continuous	and make elaborate	and make elaborate	
assessment	presentation.	presentation.	
opportunities in	•		
the lesson. Each	In pairs or     independent study	<ul> <li>In pairs or</li> <li>independent study</li> </ul>	
lesson should	independent study	independent study	
include at least	and assistance of	and assistance of	
two	internet explore the	internet explore the	
opportunities to	possibility of using	possibility of using	
use continuous	available tools,	available tools,	
assessment to	materials, preliminary	-	
support student	designs and sketch	preliminary designs	
teacher learning	models to produce	and sketch models	
Resources:	Picture forms.	to produce Picture	
• Resources.		forms	

○ links to the	3.2. Ask tutors in their	3.2. Take note and address
existing PD	subject groups to note	areas that require
Themes, for	and address areas that	clarification.
example,	may require	
action	clarification.	e.g
research,	e.g.	• How do we assist
questioning	• How do we assist	student teachers to
and to other	student teachers to	set test items that
external	set test items that	produce reliable and
reference	produce reliable and	valid results due to
material:	valid results due to	the time available
literature, on	the time available	on the Time-Table
web, Utube,	on the Time-Table	Test for and resolve
physical	Test for and resolve	phobia of some
resources,	phobia of some	student teachers in
power point;	student teachers in	examination
how they	examination	Lack of resources
should be	Lack of resources	such as studio for
used.	such as studio for	programme in our
Consideration	programme in our	schools
needs to be	schools.	5010015
given to local	Schools.	Possible solutions
availability	Possible solutions	Encourage student
• Tutors should be	Encourage student	teachers to do
expected to have	teachers to do further	further studies
a plan for the	studies (independent	(independent study)
next lesson for	study) sourcing OERs	sourcing OERs and
student teachers	and other internet	other internet
	sources.	sources.
	Encourage student	<ul> <li>Encourage student</li> </ul>
	teachers to use local	teachers to use local
	tools and materials.	tools and materials.
	Encourage and	Encourage and
	facilitate the	facilitate the
	concept of re-use as	concept of re-use as
	in Greening TVET.	in Greening TVET.
	2.2. Add to the stand of the stand	
	3.2. Ask tutors in their	3.2. in your domains, Think-
	domains to think-pair-	pair-share and write
	share and write on flip	on flip chart linkages
	chart possible linkages	between lesson 9 and
	between lesson 9 and	the Basic School
	the Basic School	curriculum.
	curriculum,	a g. The basis forms of
	e.g. The basic forms of	e.g. The basic forms of
	assessment (of, as and	assessment (of, as and
	for) use by teachers in	for) use by teachers in

L			
	delivering their lessons	delivering their lessons	
	in the JHS, and colleges	in the JHS, and colleges	
	are similar. Tools and	are similar. Tools and	
	materials use for	materials use for	
	Graphic Design.	Graphic Design.	
	Making Pictures and	Making Pictures and	
	Textiles are also similar	Textiles are also similar	
	except that at the	except that at the	
	College level, student	College level, student	
	teachers are expected	teachers are expected	
	to use more	to use more	
	sophisticated tools and	sophisticated tools and	
	materials	materials	
	3.3. Ask participants to look	3.3. Look for and discuss	
	for and discuss GESI	GESI related challenges	
	related challenges and	and how you will	
	how you will resolve	resolve them and	
	them and incorporate	incorporate same into	
	same into their lessons,	their lessons, e.g.	
		then 16330113, e.g.	
	e.g. Some student teachers may	Some student teachers may	
	-	-	
	be suffering from fear and	be suffering from fear and	
	anxiety as the end of	anxiety as the end of	
	semester approached	semester approached	
	Solution.	Solution.	
	<ul> <li>Engage student</li> </ul>	<ul> <li>Engage student</li> </ul>	
	teachers in solving	teachers in solving	
	sample questions	sample questions	
	3.4. Ask tutors to read, and	3.4. Read, and discuss the	
	discuss the continuous	continuous assessment	
	assessment	opportunities in lesson	
	opportunities in lesson 9,	9, linking it to NTEAP	
	linking it to NTEAP	(subject portfolio and	
	(subject portfolio and		
		subject based projects).	
	subject based projects).		
	NB: Inform tutor to assist	NB: Inform tutor to assist	
	student teachers to work on	student teachers to work on	
	their Subject Portfolio and	their Subject Portfolio and	
	Subject project works	Subject project works	
	identified for the semester.	identified for the semester.	
	NB: The lesson will be	NB: The lesson will be	
	assessed using	assessed using	
	tutor/peer/self-assessment	tutor/peer/self-assessment	
	(assessment as, for). NTECF	(assessment as, for). NTECF	
	(assessment as, ioi). NIECF	Lassessment as, IUI J. INTEUR	

	24 NTC 42
p 21; NTS 13	p 21; NTS 13
E.g.	E.g.
Subject Portfolio	Subject Portfolio
<ul> <li>Student teachers</li> </ul>	<ul> <li>Student teachers</li> </ul>
should construct	should construct
sample test item	sample test item
covering matching,	covering matching,
multiple choice and	multiple choice and
supply. A sample	supply. A sample
test specification	test specification
table that was used	table that was used
must also be drawn	must also be drawn
and put in the	and put in the
portfolio.	portfolio.
portjono.	
For summary of NTEAP,	For summary of NTEAP,
refer PD Session 1	refer PD Session 1
Note:	
Assist tutors to use the test	Assist tutors to use the test
specification table to	specification table to
measure the content and	measure the content and
thinking skills that their test	thinking skills that their test
intends to measure (e.g.	intends to measure (e.g.
understanding, knowledge,	understanding, knowledge,
application etc.)	application etc.)
3.4 Guide tutors to locate	3.4 Discuss with the whole
ICT and C21 related	group how you will
issues in lesson 9 and	promote the transfer of
suggest ways of	ICT and 21 <sup>st</sup> century
articulating same in the	skills to their students
lesson,	during the teaching and
, , , , , , , , , , , , , , , , , , ,	learning of lesson 9
in Digital Literagy and	i.e. Digital Literacy and
i.e. Digital Literacy and	transferable skills,
transferable skills,	inclusivity, equity,
inclusivity, equity,	
addressing diversity (NTS	addressing diversity (NTS
1a, 1c, 1d, 2c, 3n, 3j)	1a, 1c, 1d, 2c, 3n, 3j)
e a the use of phonos	e.g. the use of phones,
e.g. the use of phones,	laptops and internet to surf
laptops and internet to	for information before,
surf for information	during and after lesson. The
before, during and after	
lesson. The use of	use of projectors, and smart
projectors, and smart	boards to do presentation
boards to do	project pictures and

•	<b>Evaluation and</b> <b>review of</b> <b>session:</b> Tutors should Identifying critical friends to observe lessons and report at next session.	<ul> <li>water colour, oils], canvas, etc.), Computers and accessories, projectors, smart boards, studio, physical environment, models, etc.</li> <li>4.1. Ask tutors to identify a critical friend (subject specialist) to observe his or her lesson and report at the next PD session.</li> <li>4.2. Discuss with tutors if there is any outstanding issues to be addressed.</li> </ul>	<ul> <li>water colour, oils], canvas, etc.), Computers and accessories, projectors, smart boards, studio, physical environment, models etc.</li> <li>4.1. Identify a critical friend (subject specialist) to observe your lesson and report at the next PD session.</li> <li>4.2. Identify any outstanding issues relating to lesson and address them</li> </ul>	15 mins
		Picture Making tools (such as pencil, pens, brushes, pallet knife, easels etc., Picture Making materials (such as colour/pigment [poster, gouache, acrylics,	Picture Making tools (such as pencil, pens, brushes, pallet knife, easels etc., Picture Making materials (such as colour/pigment [poster, gouache, acrylics,	
		3.5 Guide tutors to identify Teaching Learning Resources needed to support the teaching and learning of lesson 4, e.g. internet facility, laptop, PCs, Smart Phones, etc.	3.5. Identify TLRs or other resources needed to be developed to support teaching and learning of lesson 9, e.g. <i>e.g.</i> <i>internet facility, laptop,</i> <i>/PCs/Smart phones,</i>	
		Leadership and collaborative learning through team/group work.	Leadership and collaborative learning through team/group work.	
		Promote critical thinking through independent learning and take home assignments,	Promote critical thinking through independent learning and take home assignments,	
		presentation project pictures and materials during teaching and learning.	materials during teaching and learning.	

•	Identifying and addressing any outstanding issues relating to	<i>Note:</i> Involve all tutors in finding solution to issues raised.		
	the lesson/s for clarification	4.3. Ask tutors to develop a concrete plan for teaching lesson 9.	4.3. Develop a concrete plan for teaching lesson 9.	

## Tutor PD Session for Lesson 10 in the Course Manual

Focus: the bullet points provide the frame for what is to be done in the session. The SWL should use the bullets to guide what they write for the SL/HoD and tutors to do and say during each session. Each bullet needs to be addressed and specific reference should be made to the course manual/s.	Guidance notes on Leading the session. What the SL/HoDs will have to say during each stage of the session	Guidance Notes on Tutor Activity during the PD Session. What PD Session participants (Tutors) will do during each stage of the session.	Time in session
<ol> <li>Introduction to the session</li> <li>Review prior learning</li> <li>A critical friend to share findings for a short discussion and lessons learned</li> <li>Reading and discussion of the</li> </ol>	1.1 ICE BREAKER Start with a cheerful and thought provoking activity related to the major concepts in any of the TVET domains to arouse and sustain the interest of tutors in the session	1.1 ICE BREAKER Listen and create a cheerful and thought provoking activities related to the major concept in your lesson 10 to arouse and sustain the interest of your colleagues in PD session 10 activities	20 mins
<ul> <li>discussion of the introductory sections of the lesson up to and including learning outcomes and indicators</li> <li>Overview of content and</li> </ul>	Reflection Activity 1.2 Ask the tutors to write down 2 achievements and one major challenge they observed during the delivery of lesson 9 and share same.	Reflection Activity 1.2 Write down two achievements and one major challenge you observed in lesson 9 and share same.	
identification of any distinctive aspects of the lesson/s, NB The guidance for SL/HoD should identify and address	1.3 Assist critical friends to paste their observations of lesson 9 for a gallery walk and reflection as a way of enhancing professional practice of tutors.	1.3 Take a gallery walk and read critical friends' observations pasted on the wall for reflection as a way of enhancing your professional practice.	

any areas where tutors might require clarification on any aspect of the lesson. NB SL/HoD should ask tutors to plan for their teaching as they go through the PD session	1.4 <u>Ask tutors to tell how</u> <u>students will be</u> <u>prepared to employ</u> <u>relevant teaching,</u> <u>learning and assessment</u> <u>strategies during the</u> <u>basic school classroom</u> <u>work in STS in year 4</u> <u>semester 1. (Collect a</u> <u>few examples for</u> <u>discussion)</u>	1.4 T <u>ell how students will</u> <u>be prepared to employ</u> <u>relevant teaching,</u> <u>learning and</u> <u>assessment strategies</u> <u>during the basic school</u> <u>classroom work in STS</u> <u>in year 4 semester 1.</u>
	1.5 Ask tutors to skim the introduction sections of lesson 10 in the TVET course manual to identify learning outcomes and their aligned learning indicators, e.g. sample Los and Lis, e.g.	1.5 Skim the introduction sections of lesson 10 in your course manual to identify learning outcomes and their aligned learning indicators, e.g.
	Agriculture/Home Economics LO 1. Demonstrate knowledge and skills in setting good essay test items LI. 1. Set essay test items that produce reliable and valid results given a set of topics and learning outcomes, etc.	Agriculture/Home Economics LO 1. Demonstrate knowledge and skills in setting good essay test items LI. 1. Set essay test items that produce reliable and valid results given a set of topics and learning outcomes, etc.
	Technical /Visual Art LO 2 Demonstrate knowledge and understanding of basic concepts of art exhibitions LI. 1 List, explain the step by step approach to oxhibition organization	Technical /Visual Art LO 2 Demonstrate knowledge and understanding of basic concepts of art exhibitions LI. 1 List, explain the step by step approach to
	exhibition organization LO 3 Demonstrate knowledge and skill in the planning and	exhibition organization LO 3 Demonstrate knowledge and skill in the planning and

r		1
	essay type test items	essay type test items
	are, guideline for their	are, guideline for their
	construction,	construction,
	advantages and	advantages and
	disadvantages	disadvantages
	5	
	3. Set reliable and valid	3. Set reliable and valid
	essay type test items	essay type test items
	given a set of topics and	given a set of topics and
	learning outcomes	learning outcomes
		Tachrical () (inval ADT
	Technical/Visual ART	Technical/Visual ART
	LO 2 Demonstrate	LO 2 Demonstrate
	knowledge and	knowledge and
	understanding of	understanding of
	basic concepts of art	basic concepts of art
	exhibitions	exhibitions
	LI 1 List, explain the step by	LI 1 List, explain the step by
	step approach to	step approach to
	exhibition organization	
	Teacher activity (LO2 and LI.	Teacher activity (LO 2 and
	2)	LI. 2)
	<i>1. Guide student teachers</i>	1. Guide student teachers
	to form mixed	to form mixed
	-	-
	gender/ability groups	gender/ability groups
	and surf the internet to	and surf the internet to
	find how exhibitions are	find how exhibitions are
	organised.	organised.
	2. Tutor guides student	2. Tutor guides student
	teachers to share their	teachers to share their
	findings with the whole	findings with the whole
	class	class
	1.7 Lead tutors in pairs to	1.7 In pairs study and discuss
	study and discuss the	the overview of lesson 10
	overview of lesson 10	and write the distinctive
	and write the distinctive	features of lesson 10 on
	features of lesson 10 on	sticky notepad and paste
	sticky notepad and	a flipchart, etc.
	paste a flipchart, etc.	
	Guidance Note	Guidance Note
	Refer to the TVET Course	Refer to the TVET Course
	Manuals	Manuals
		Agriculture
		Guidance Note
		ı

#### Refer to the TVET Course Manuals

Agriculture Types of test (Essay Test): Principles of developing easy test items, developing marking schemes, advantages and disadvantages of Easy test and conducting easy test.

Home Economics Types of Tests – Essay: characteristics of easy test, and basic principles of constructing easy test items, importance of easy test and challenges of easy test.

Technical Skills Assessment using Multiple Choice Question: Developing a table of specification, content weighting, principles of setting multiple choice test items. Development of business plan

### Visual Art

Assessment concept for Preschool Art: guidelines for scoring children work (scribbling stage, preschematic stage, schematic stage and drawing realism stage)

Planning and making graphic design, items: creating graphic design, contemporary graphic design items and their symbolic meaning, modern

Agriculture Types of test (Essay Test): Principles of developing easy test items, developing marking schemes, advantages and disadvantages of Easy test and conducting easy test.

Home Economics Types of Tests – Essay: characteristics of easy test, and basic principles of constructing easy test items, importance of easy test and challenges of easy test.

Technical Skills Assessment using Multiple Choice Question: Developing a table of specification, content weighting, principles of setting multiple choice test items. Development of business plan

### Visual Art

Assessment concept for Preschool Art: guidelines for scoring children work (scribbling stage, preschematic stage, schematic stage and drawing realism stage)

 Planning and making graphic design, items: creating graphic design, contemporary graphic design items and their
 symbolic meaning, modern

			ı
	approach to graphic design	approach to graphic design	
	(digital) and benefits of	(digital) and benefits of	
	graphic design items, etc.	graphic design items, etc.	
	Display / Exhibition and	Display / Exhibition and	
	Sharing of Textile products:	Sharing of Textile products:	
	Type of exhibition, planning	Type of exhibition, planning	
	exhibition, advantages and	exhibition, advantages and	
	disadvantages of exhibition,	disadvantages of exhibition,	
	etc.	etc.	
2. Concept	Concept Development	Concept Development	15 mins
Development	2.1 Ask tutors to read	2.1 Read the lesson 10,	
(New learning	lesson 10, description	description and identify	
likely to arise in	and identify the new	the new learning areas	
lesson/s):	-	of lesson 10 and share	
<ul> <li>Identification and</li> </ul>	learning areas of lesson		
discussion of new	10 and share in their	with your group.	
learning,	buzz groups.		
potential barriers	Refer to the guidance notes	Refer to the guidance notes	
to learning for	in 1.6	in 1.6	
student teachers	2.2 Ask tutors to	2.2 Brainstorm the major	
or students,	brainstorm the major	concepts and	
concepts or	concepts and	pedagogical techniques	
pedagogy being	pedagogical techniques	in lesson 10, e.g.	
introduced in the	of lesson 10, e.g.	in lesson 10, e.g.	
lesson, which	_	Agricultura (Conconta)	
need to be	Agriculture (Concepts)	Agriculture (Concepts)	
explored with the	<ul> <li>Types of Tests – Essay</li> </ul>	• Types of Tests – Essay	
SL/HoD	Pedagogy:	Pedagogy:	
NB The guidance for	<ul> <li>face-to-face,</li> </ul>	• face-to-face,	
SL/HoD should set	discussions, e-	discussions, e-	
out what they need	learning	learning	
to do to introduce	opportunities, hands-	opportunities, hands-	
and explain the	on activities, etc.	on activities, etc.	
issues/s with tutors	Home Economics (concept)	Home Economics (concept)	
	• Types of Tests – Essay	• Types of Tests – Essay	
	Technical	Technical	
	Cost a Product or	Cost a Product or	
	Service	Service	
	Assessment concept	Assessment concept	
	for Pre-school Art	for Pre-school Art	
	Pedagogy:	Pedagogy:	
	• Talk-for learning,	• Talk-for learning,	
	through group	through group	
	discussions,	discussions,	
	planning, and a	planning, and a	
	display,, Develop	display, Develop	
	business plan	business plan	

	Developing a table	Developing a table
	of specification,	of specification,
	content weighting	content weighting
,	etc.	etc.
	/isual Art, e.g.	Visual Art, e.g.
	Assessment concept	Assessment concept
	for Pre-school Art	for Pre-school Art
	<ul> <li>Display / Exhibition</li> </ul>	Display / Exhibition
	and Sharing of	and Sharing of
	Finished art works	Finished art works
	(Graphic Design,	(Graphic Design,
	Picture Making,	Picture Making,
	Textile Design items)	Textile Design items)
F	Pedagogy:	Pedagogy:
	<ul> <li>Group discussions,</li> </ul>	Group discussions,
	planning, and a	planning, and a
	display, etc.	display, etc.
	2.3 Guide tutors to talk	2.3 Discuss the potential
	about the potential	barriers are there to the
	barriers to the teaching	teaching and learning of
	and learning of concepts	concepts in lesson 10.
	in lesson 10 and suggest	Suggest possible ways
	possible ways of	to overcoming the
	overcoming the barriers	barriers identified using
	identified using the	the radio reporter
	radio reporter	techniques
	techniques,	
e	e.g.	e.g.
5	Some student teachers may	Some student teachers may
Ļ	perceive easy test easy to	perceive easy test easy to
s	set, but difficulty to adopt	set, but difficulty to adopt
L	because:	because:
	• of the difficulty in	• of the difficulty in
	scoring them.	scoring them.
	Irresponsible	Irresponsible
	behaviour of student	behaviour of student
	toward assessment	toward assessment
	activities leading to	activities leading to
	copy work	copy work
	• difficulty in	• difficulty in
	Developing business	Developing business
	plan	plan
	<b>I</b>	La

	<ul> <li>2.4 Guide tutors to brain- write and share alternative teaching and learning strategies that could be used to help student teachers develop a comprehensive pedagogical-content knowledge,</li> <li>e.g. Mini group activities, use of resource person, field trip, etc.</li> </ul>	<ul> <li>2.4 Brain-write and share alternative teaching and learning strategies that could use to help student teachers develop a comprehensive pedagogical-content knowledge,</li> <li>e.g. Mini group activities, use of resource person, field trip, etc.</li> </ul>	
<ul> <li>3. Planning for teaching, learning and assessment activities for the lesson/s</li> <li>Reading and discussion of the teaching and learning activities</li> <li>Noting and addressing areas where tutors may require clarification</li> <li>Noting opportunities for making links to the Basic School Curriculum</li> <li>Noting opportunities for integrating: GESI responsiveness and ICT and 21<sup>st</sup> C skills</li> <li>Reading, discussion, and identification of continuous assessment opportunities in</li> </ul>	<ul> <li>Planning the lesson</li> <li>3.1 Guide tutors to discuss the teaching and learning activities of lesson 10.</li> <li>Refer 2.2 above.</li> <li>3.2 Let tutors ask questions on any issues that require clarification</li> <li>3.3 Ask tutors to read and list the prescribed assessment activities in the course manual, e.g.</li> <li>Oral quiz</li> <li>Self-assessment</li> <li>Peer assessment</li> <li>Tutor assessment</li> <li>Public assessment</li> <li>Public assessment activities that could be used to further assess student teachers works and strengthen their effectiveness during their STS, e.g.</li> <li>Use a mock auction</li> </ul>	<ul> <li>Planning the lesson</li> <li>3.1 Share your view on the teaching and learning activities of lesson 10 for an effective discussion.</li> <li>Refer 2.2 above</li> <li>3.2 Ask questions on any issues that require clarification</li> <li>3.3 Read and list the prescribed assessment activities in the course manual, e.g.</li> <li>Oral quiz</li> <li>Self-assessment</li> <li>Peer assessment</li> <li>Tutor assessment</li> <li>Public assessment</li> <li>Public assessment activities that could be used to further assess student teachers works and strengthen their effectiveness during their STS, e.g. A mock auction: (in which peers and others attempt to</li> </ul>	40 mins

	, ,, ,, ,, ,	
lesson should	and others attempt to price	according to their level
include at least	the works according to their	of perfection).
two	level of perfection).	
opportunities to		
use continuous	3.5 Guide tutors to discuss	3.5 Participate in the
assessment to	how they would help	discussion and share
support student	their student teachers to	view on how you would
teacher learning	link the lesson 10	help your student
Resources:	activities to the Career	teachers to link lesson
<ul> <li>links to the</li> </ul>	Technology curriculum	10 activities to the Basic
	in the JHS, e.g.	School curriculum, e.g.
existing PD		
Themes, for	Since many of the topics are	Since many of the topics are
example,	related in the two curricula,	related in the two curricula,
action	tutor must deliver lesson 10	tutor must deliver lesson 10
research,	in a way that student	in a way that student
questioning	teachers can immolate	teachers can immolate
and to other	them during their STS.	them during their STS.
external		
reference	3.6 Ask tutor to use variety	3.6 Using reversed
material:	of 21 <sup>st</sup> learning technics	brainstorming find varied
literature, on	such as buzz group,	ways to integrate GESI,
web, Utube,	Crossover, Fishbowl,	ICT, SEN and 21 <sup>st</sup> C skills
physical	Syndicate learning to	in lesson 10. Brain-write
resources,	achieve integration of	your suggestions on
	GESI, ICT, SEN and 21 <sup>st</sup> C	sticky pad and pastes on
power point;	skills	
how they	SKIIIS	a wall for a mini-gallery
should be		walk,
used.	e.g.	e.g.
Consideration	Tutor can us a variety of C	Tutor can us a variety of C
needs to be	21 <sup>st</sup> learning technics such	21 <sup>st</sup> learning technics such
given to local	as buzz group, Crossover,	as buzz group, Crossover,
savailability	Fishbowl, Syndicate learning	Fishbowl, Syndicate learning
<ul> <li>guidance on</li> </ul>	to achieve integration of	to achieve integration of
any power	GESI, ICT, SEN and 21 <sup>st</sup> C	GESI, ICT, SEN and 21 <sup>st</sup> C
point	skills	skills
presentations,	-Crossover learning (refer	-Crossover learning (refer
TLM or other	PD Session 6:3.2)	PD Session 6:3.2)
resources	-Syndicate: is a deeper	-Syndicate: is a deeper
which need to	learning involving small	learning involving small
be developed	groups of between 5 and	groups of between 5 and
•		10 students working in
to support	10 students working in	_
learning	semi-independent (tutor-	semi-independent (tutor-
• Tutors should be	less) groups towards the	less) groups towards the
expected to have	achievement of a	achievement of a
a plan for the	collective goal or task.	collective goal or task.
next lesson for	https://onlinelibrary.wile	https://onlinelibrary.wile
student teachers	y.com	y.com

-Fishbowl strategy: is for	-Fishbowl strategy: is for	
organizing medium-to	organizing medium-to	
large group discussions.	large group discussions.	
Students are separated	Students are separated	
into inner and outer	into inner and outer	
circle. In the inner circle	circle. In the inner circle	
or the fishbowl, students	or the fishbowl, students	
have a discussion;	have a discussion;	
student in the outer	student in the outer	
circle listen to the	circle listen to the	
discussion and takes	discussion and takes	
note. This is useful for	note. This is useful for	
situation in which there	situation in which there	
are students who want	are students who want	
to dominate or be at the	to dominate or be at the	
centre of attraction all	centre of attraction all	
the time. The inner circle	the time. The inner circle	
can be changed from	can be changed from	
time to time, etc.	time to time, etc.	
3.6 Guide tutors to read in	3.6 Select your pair to read	
pairs read and list the	and list the teaching and	
teaching and learning	learning resources stated	
resources stated in the	in your Course Manual,	
TVET Course Manual,	e.g. TVET Course is to be	
e.g.	tough thus;	
group discussions, exhibition,	group discussions, exhibition,	
planning, and a display of	planning, a display of	
Textile products at the	Paintings, /collages/mosaics.	
, College's art studio or any	Paintings, drawings, Textile	
appropriate environment	products, etc at the College's	
suitable for an art exhibition.	art studio, or prepare a	
	suitable space for the	
	exhibition.	
3.7 Encourage tutors to	3.7 Identify other suitable	
identify other suitable	teaching and learning	
teaching and learning	resources you could use	
resources they could use	to make learning more	
to make learning more	meaningful among the	
meaningful, e.g. <i>knife,</i>	student teachers, e.g.	
drawing tools, brush,	knife, drawing tools,	
pallet Knife, colour:	brush, pallet Knife,	
(poster, acrylic, water	colour: (poster, acrylic,	
colour, gouache,	water colour, gouache,	
pastels), pallet knife,	pastels), pallet knife,	
lab-top, e-library,	lab-top, e-library,	
., //		

		<ul> <li>computers, projector, etc.</li> <li>3.8 Ask tutors to be in pairs to prepare their outline for lesson 10 and share same with each other.</li> </ul>	<ul> <li>computers projector, etc.</li> <li>3.8 In pairs prepare your outline for lesson 10 and share same with each other.</li> </ul>	
4.	Evaluation and review of session:	Evaluation and review of session:	Evaluation and review of session:	15 mins
•	Tutors should Identifying critical friends to observe lessons and report at next session.	4.1 Using question and answer technique lead tutors to recap the main issues discussed in the session.	4.1 Listen and respond to the recap questions to review the session.	
•	Identifying and addressing any outstanding issues relating to the lesson/s for clarification	<ul> <li>4.2 Remind tutors to invite critical friends to sit in and observe their lesson 10s and give feedback to enhance reflective practices among tutors.</li> </ul>	4.2 Invite a critical friend to sit in and observe your lesson 10 and give you feedback to enhance your reflective practices.	
		4.3 Give opportunity for tutors to ask questions on any outstanding issues that need further clarification	4.3 Ask questions on any outstanding issues that need clarification	
		Preparation Before next PD Session Remind tutors to study lesson 11 in their respective course manuals before the next PD session	Preparation Before next PD Session Remember to study lesson 11 in your course manual before the next PD session	

# Tutor PD Session for Lesson 11 Onwards in the Course Manual

Focus: the bullet points provide the frame for what is to be done in the session. The SWL should use the bullets to guide what they write for the SL/HoD and tutors to do and say during each session. Each bullet needs to be addressed and specific reference should be made to the course manual/s.	Guidance notes on Leading the session. What the SL/HoDs will have to say during each stage of the session	Guidance Notes on Tutor Activity during the PD Session. What PD Session participants (Tutors) will do during each stage of the session.	Time in session
<ol> <li>Introduction to the session</li> <li>Review prior learning</li> <li>A critical friend to share findings for a short discussion and lessons learned</li> <li>Reading and discussion of the</li> </ol>	<ul> <li>1.1 Ask tutors to write one thing they learnt in their last PD session and how they applied it in their teaching</li> <li>1.2. Ask tutors to share their views with the whole group.</li> </ul>	<ul> <li>1.1 Revision Activity: Write one thing you learnt in your last PD session and how you applied it in your teaching.</li> <li>1.2. Share your views with the whole group.</li> </ul>	20 mins
<ul> <li>introductory sections of the lesson up to and including learning outcomes and indicators</li> <li>Overview of content and identification of any distinctive aspects of the lesson/s,</li> <li>NB The guidance for SL/HoD should</li> </ul>	<ul> <li>1.3. Ask at least two critical friends to give brief reports on the lessons they observed.</li> <li>1.4. Ask tutors to tell how students will be prepared to employ relevant teaching, learning and assessment strategies during the basic</li> </ul>	<ul> <li>1.3. Share your report on lessons observed as a critical friend.</li> <li>1.4. T<u>ell how students will</u> <u>be prepared to employ</u> <u>relevant teaching,</u> <u>learning and</u> <u>assessment strategies</u> <u>during the basic school</u></li> </ul>	

identify and address any areas where tutors might require clarification on any aspect of the lesson. NB SL/HoD should	<u>school classroom</u> work in STS in year 4 semester 1. ( <i>Collect a</i> <i>few examples for</i> discussion)	<u>classroom work in STS</u> <u>in year 4 semester 1.</u>
ask tutors to plan for their teaching as they go through the PD session	1.5 Ask tutors to read and discuss the relevance and alignment of the introductory sections of the lesson including learning outcomes and indicators.	1.5 Read and discuss the relevance and alignment of the introductory sections of the lesson including learning outcomes and indicators.
	<ul> <li>1.6. Ask tutors to identify important or distinctive features of the lesson: e.g.</li> <li>The distinctive aspect of Agriculture and Home Economics is that they looked at types of Tests-Essay, and now they are poised to share their experiences in lesson 11.</li> </ul>	<ul> <li>1.6. Identify important or distinctive features of the lesson</li> <li>The distinctive aspect of Agriculture and Home Economics is that they looked at types of Tests-Essay, and now they are poised to share their experiences in lesson 11.</li> </ul>
	• Technical also looked at assessment using multiple choice Questions in lesson 10 and now building on how to assess the folios in practical/ project works in lesson 11.	• Technical also looked at assessment using multiple choice Questions in lesson 10 and now building on how to assess the folios in practical/ project works in lesson 11.
	<ul> <li>All the four aspect of visual art are looking at assessment concept for pre- school and now building on it by looking at how practicals can be supervised. The other</li> </ul>	<ul> <li>All the four aspect of visual art are looking at assessment concept for pre- school and now building on it by looking at how practicals can be supervised. The other</li> </ul>

	three looked at planning and making in Graphic design, Picture Making and Textiles in lesson 10, then how to display for exhibitions in lesson 11. Agriculture: • Administration of achievement tests and preparation of marking scheme. Home Economics: • Administration of achievement tests and marking scheme. Technical: • Assessment of portfolio • Costing a Product or Service Visual Arts: • Invigilating/Supervisi ng Practical Art Paper • Display/Exhibition and Sharing of Finished art works: - Graphic Design items • Pictures Making, and • Textile products (II,) NB: Refer to the relevant TVET manuals.	three looked at planning and making in Graphic design, Picture Making and Textiles in lesson 10, then how to display for exhibitions in lesson 11.	
<ul> <li>2. Concept Development (New learning likely to arise in lesson/s):</li> <li>Identification and discussion of new learning, potential barriers</li> </ul>	<ul> <li>2.1. Ask tutors to read and discuss the new learning in lesson 11.</li> <li>e.g. Agriculture &amp; Home Economics:</li> <li>Preparation of marking scheme. Technical:</li> </ul>	<ul><li>2.1. Identify and discus the new learning of lesson 11.</li></ul>	15 mins

to learning for student teachers or students, concepts or pedagogy being introduced in the lesson, which need to be explored with the SL/HoD NB The guidance for SL/HoD should set out what they need to do to introduce	<ul> <li>Skills in producing an artifact.</li> <li>Visual Art:</li> <li>Climate in a potential art examination room.</li> <li>Plan and organize an art exhibition and jury sessions for graphic design, picture making and textiles.</li> </ul>	2.2. Discuss potential
and explain the issues/s with tutors	2.2 Ask tutors to discuss potential barriers to learning lesson 11 for student teachers. <i>e.g.</i> <i>Barrier</i>	barriers to learning for student teachers or students, e.g. Barrier
	<ul> <li>Disparity in preparation of marking schemes fro practical works.</li> <li>The semester is ending and student teachers' anxiety may be high making concentration in class problematic</li> <li>Organizing exhibition is very involving. It involves money, time, contacts, energy as well as organizational skills. If the student teachers have been taken on a field trip to visit an exhibition earlier, it would be an advantage.</li> </ul>	<ul> <li>Disparity in preparation of marking schemes fro practical works.</li> <li>The semester is ending and student teachers' anxiety may be high making concentration in class problematic</li> <li>Organizing exhibition is very involving. It involves money, time, contacts, energy as well as organizational skills. If the student teachers have been taken on a field trip to visit an exhibition earlier, it would be an advantage.</li> </ul>
	Solution <ul> <li>Refer to PD session</li> </ul>	Solution • Refer to PD session
	7:3;7 for harmonized marking scheme for Project works.	7:3;7 for harmonized marking scheme for Project works.

	<ul> <li>Student teachers should organize the exhibition as a team with each team tackling the various aspects of the programme.</li> <li>Ask tutors to surf OERs and other internet sources to find and use think-pair-and –Share possible new approaches to the teaching within their subject domain groups to resolve challenges raised in 2.2 above, E.g.</li> <li>Invite a resource person who is good at planning scheme, to take the tutors and the student teachers through.</li> <li>Invite an artist or curators as resource person who has defied and risen above social, cultural, religious, etc. stereotype in the community to interact with student teachers on some of their works and exhibitions they held.</li> </ul>	<ul> <li>Student teachers should organize the exhibition as a team with each team tackling the various aspects of the programme.</li> <li>Surf OERs and other internet sources to find and think-pair-and – Share possible new approaches to the teaching within your subject domain to resolve challenges raised in 2.2 above. E.g.</li> </ul>	
<ul> <li>3. Planning for teaching, learning and assessment activities for the lesson/s</li> <li>Reading and discussion of the</li> </ul>	3.1. Lead tutors to read and discuss the teaching and learning activities in the course manual, e.g. talk for learning methods such as interactive lecture, discussions and turn and talk,	3.1. Read and discuss the teaching and learning activities in the course manuals for the various group levels, e.g. talk for learning methods such as interactive lecture, discussions and turn and talk, demonstration,	40 mins

<ul><li>teaching and learning activities</li><li>Noting and addressing areas</li></ul>	demonstration, planning, and a display of Pictures, etc.	planning, and a display of Pictures, etc.	
<ul> <li>where tutors may require clarification</li> <li>Noting opportunities for making links to the Basic School</li> </ul>	<ul> <li>3.2. Ask tutors to identify areas that need clarification, e.g. turn and talk</li> <li>Turn and talk: this used to make every student contribute in class. It can</li> </ul>	<ul> <li>3.2. Identify areas that need clarification, e.g. turn and talk</li> <li>Turn and talk: this used to make every student contribute in class. It can</li> </ul>	
Curriculum	be used in a variety of	be used in a variety of	
<ul> <li>Noting opportunities for</li> </ul>	situations, e.g.	situations, e.g.	
<ul> <li>opportunities for integrating: GESI responsiveness and ICT and 21<sup>st</sup> C skills</li> <li>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</li> </ul>	<ul> <li>As a warm-up activity to discuss previous lesson</li> <li>During class discussions as a way for students to discuss ideas before sharing them with the class</li> <li>As a closing activity so that students can review what was learned in the lesson</li> <li>As a clarification tool for a complex problem or new guiding question posed by the teacher</li> </ul>	<ul> <li>As a warm-up activity to discuss previous lesson</li> <li>During class discussions as a way for students to discuss ideas before sharing them with the class</li> <li>As a closing activity so that students can review what was learned in the lesson</li> <li>As a clarification tool for a complex problem or new guiding question posed by the teacher</li> </ul>	
<ul> <li>Resources:         <ul> <li>Links to the existing PD</li> <li>Themes, for example, action research, questioning and to other external reference material: literature, on</li> </ul> </li> </ul>	Usually the teacher poses a simple question and asks the student to turn and talk to a predetermined partner who can either be: • Eyeball partner (person facing him/her) • Shoulder partner (sitting at his/her side) or	Usually the teacher poses a simple question and asks the student to turn and talk to a predetermined partner who can either be: • Eyeball partner (person facing him/her) • Shoulder partner (sitting at his/her side) or	

physical resources, power point; how they should be used.	<ul> <li>Clock partner (4 people around him/her; one for 12. O'clock, one for 3. One 6 and other for 9 O'clock</li> </ul>	Clock partner (4 people around him/her; one for 12. O'clock, one for 3. One 6 and other for 9 O'clock
<ul> <li>Consideration needs to be given to local availability</li> <li>Guidance on any power point presentations, TLM or other resources which need to be developed to support learning</li> <li>Tutors should be expected to have a plan for the next lesson for student teachers</li> </ul>	<ul> <li>3.3. Lead tutors to discuss in their various groups how the different activities would be carried out in the classroom to achieve the LOs and LIs for lesson 11and at the same time strike linkage with the Career Technology curriculum in the JHS, e.g.</li> <li>Use turn to talk as a starter</li> <li>Use think-pair-share collaborative learning</li> <li>Use buzz groups for group discussions</li> <li>Tutor 'Do' for student teachers 'copy' as in</li> </ul>	<ul> <li>3.3. Discuss in your various groups how the different activities would be carried out in classroom to achieve the course manual for lesson 11, e.g. Use turn to talk as a starter</li> <li>Use think-pair-share collaborative learning</li> <li>Use buzz groups for group discussions</li> <li>Do for student teachers copy as in demonstration, etc.</li> </ul>
	demonstration, etc.	NB:
	<ul> <li>Take into account that some students are slow learners and others are gifted.</li> <li>Do not use harsh, threatening language or actions that instill fear in socially reserved and shy student teachers.</li> </ul>	<ul> <li>Take into account that some students are slow learners and others are gifted.</li> <li>Do not use harsh, threatening language or actions that instill fear in socially reserved and shy student teachers.</li> </ul>
	3.4 Ask tutors to brain-write practical steps they would take to ensure	3.4 Brain-write practical steps you would take to ensure GESI issues, 21 <sup>st</sup>

a – a		
GESI issues, 21 <sup>st</sup> century,	century, and ICT skills	
and ICT skills are applied	are applied in the	
in the lesson.	lesson.	
Refer to NTS, 2a, 2b, 2c, 2e,		
2f, 2i, 2j	Refer to NTS, 2a, 2b, 2c, 2e,	
e.g.	2f, 2i, 2j	
<ul> <li>The use of ICT tools</li> </ul>	<ul> <li>The use of ICT tools</li> </ul>	
such as computer,	such as computer,	
smart phones,	smart phones,	
projector, etc. to	projector, etc. to	
prepare and present	prepare and present	
lessons.	lessons.	
• Development of	• Development of	
collaborative,	collaborative,	
creative and	creative and	
communicative skills	communicative skills	I
through turn and	through turn and talk,	
talk, think-pair-share,	think-pair-share,	
group works and	group works and	
presentations, etc.	presentations, etc.	
presentations, etc.	presentations, etc.	
3.5. Ask tutors in their buzz		
groups to list	3.5. Identify where and	
assessment	which 21 <sup>st</sup> century	
	skills that can be	
opportunities in the lesson and discuss how	developed or applied	
	in the lesson.	
they would use them to		
support student		
teachers' work at the		
STS.		
3.6. Ask tutors to read the	3.6. Read the assessment	
assessment activities in	activities in the various	
the various manuals	manuals and identify	
and identify areas that	areas that require	
require clarification,	clarification e.g. jury,	
e.g. jury, self-	self-assessment peer-	
assessment peer-	assessment, tutor	
assessment, tutor	assessment, exhibition,	
assessment, exhibition,	etc.	
etc.		
Exhibition	Exhibition	
How to organize an Art	How to organize an Art	
exhibition:	exhibition:	
Before the Exhibition	Before the Exhibition	
	1	

.	1. Produce /organize	1. Produce / organize
	/select artefacts to be	/select artefacts to be
	exhibited	exhibited
	2. Select a theme for the	2. Select a theme for the
	exhibition	exhibition
	3. Locate appropriate site	<i>3. Locate appropriate site</i>
	for the exhibition	for the exhibition
	4. Seek formal permission	4. Seek formal permission
	for the use of the facility	for the use of the
	ahead of time	facility ahead of time
	5. Advertise the	5. Advertise the
	programme (electronic,	programme (electronic,
	poster, direct letters to	poster, direct letters to
	individuals and/or	individuals and/or
	organizations)	organizations)
	6. Make arrangements	6. Make arrangements for
	for security, ushers and	security, ushers and
	other protocol role	other protocol role
	players	players
	7. Draw a programme for	7. Draw a programme for
	opening and closing	opening and closing
	ceremonies	ceremonies
E	xhibition Hall	Exhibition Hall
	1. Arrange works either	1. Arrange works either
	according to art forms,	according to art forms,
	themes, colour	themes, colour
	schemes, etc.	schemes, etc.
	2. Make sure there is	2. Make sure there is
	enough lighting in the	enough lighting in the
	room(s)	room(s)
	3. Clearly mark works	3. Clearly mark works
	with themes and for	with themes and for
	-	-
	sale (if intended)	sale (if intended)
	pening and Closing	Opening and Closing
[	eremonies	Ceremonies
	1. Must be as short as	1. Must be as short as
	possible	possible
	2. Must have a Chairman,	2. Must have a Chairman,
	an MC and a Guest of	an MC and a Guest of
	honour (who may or	honour (who may or
	may not deliver the key	may not deliver the key
	note address)	note address)
	3. May also have media	3. May also have media
	coverage as well as an	coverage as well as an
	art critique, etc.	art critique, etc.
	fter the Exhibition	After the Exhibition
	1. Clear the site	1. Clear the site

		I	,
	<ol> <li>Write to thank all dignitaries who played a part in its success.</li> <li>Remember to Pay all outstand bills, etc.</li> <li>T. Lead tutors in list the needed inclusive resources for teaching and learning of the concepts in lesson 11. e.g. computer and its accessories, projector, power/light, internet facility, books, drawing/printmaking materials and tools, etc.</li> <li>Ensure that everybody has a concrete plan and prepare the outline of their respective lessons to guide their lesson 11 presentations. NB: In the case of unresolved issues consult the subject leads.</li> </ol>	<ol> <li>Write to thank all dignitaries who played a part in its success.</li> <li>Remember to Pay all outstand bills, etc.</li> <li>T. Identify the needed inclusive resources for teaching and learning of the concepts in lesson 11, e.g. e.g. computer and its accessories, projector, power/light, internet facility, books, drawing/printmaking materials and tools, etc.</li> <li>Plan and prepare the outline of their respective lessons to guide their lesson 11 presentations.</li> </ol>	
<ul> <li>4. Evaluation and review of session:</li> <li>Tutors should Identifying critical friends to observe lessons and report at next session</li> <li>Identifying and addressing any outstanding issues relating to the lesson/s for clarification</li> </ul>	<ul> <li>4.1. Ask tutors to identify the critical friend(s) to observe their lesson and report the outcome at the next PD session.</li> <li>NB: Critical friend (s) should be in subject specific areas.</li> <li>4.2. Ask tutors to identify any outstanding issues relating to this lesson for clarification. <i>e.g.</i></li> </ul>	<ul> <li>4.1 Identify the critical friend to observe your lesson and report outcome at the next PD session.</li> <li>4.2. Any outstanding issues relating to this lesson for clarification.</li> </ul>	15 mins

Remind the tutors to prepare a plan for	
teaching the lesson.	

# Tutor PD Session for Lesson 12 in the Course Manual

Focus: the bullet points provide the frame for what is to be done in the session. The SWL should use the bullets to guide what they write for the SL/HoD and tutors to do and say during each session. Each bullet needs to be addressed and specific reference should be made to the course manual/s.	Guidance notes on Leading the session. What the SL/HoDs will have to say during each stage of the session	Guidance Notes on Tutor Activity during the PD Session. What PD Session participants (Tutors) will do during each stage of the session.	Time in session
<ol> <li>Introduction to the session</li> <li>Review prior learning</li> <li>A critical friend to share findings for a short discussion and lessons learned</li> <li>Reading and discussion of the introductory sections of the lesson up to and including learning outcomes and indicators</li> <li>Overview of content and identification of any distinctive aspects of the lesson/s,</li> </ol>	<ul> <li>1.a. Review of the Semester's work</li> <li>1.1 Ask tutors to share with the whole group their experiences when assessing student teachers' subject portfolio and subject project for the semester.</li> <li>e.g. either,</li> <li>Display a short video produced by student teachers or</li> <li>Show pictures of exhibited project works, etc.</li> <li>1.2. Lead tutors to review/reflect on the skills the student teachers have learnt or acquired from the various courses in the semester.</li> </ul>	<ul> <li>1.a. Review of the Semester's work</li> <li>1.1 Share with the whole group your experience when assessing student teachers' subject portfolio and subject project for the semester,</li> <li>e.g. either,</li> <li>Display a short video produced by student teachers or</li> <li>Show pictures of exhibited project works, etc.</li> <li>1.2. Review/reflect on the skills student teachers have learnt or acquired from the various courses in the semester.</li> </ul>	20 mins

NB The guidance for SL/HoD should identify and address any areas where tutors might require clarification on any aspect of the lesson. NB SL/HoD should ask tutors to plan for their teaching as they go through the PD session	<ul> <li>1.3. Ask tutors to write on flipcharts and discuss their peculiar experiences (successes and challenges) in the teaching of Year 3 Semester 2 Courses</li> <li>1. b. Focus on Lesson 12</li> <li>1.4 Ask one or two critical friend who observed lesson 11 to share their experiences with the group.</li> </ul>	<ul> <li>1.3. Write on flipcharts and discuss your peculiar experiences (successes and challenges) their teaching of Year 3 Semester 2 Courses.</li> <li>1. b. Focus on Lesson 12</li> <li>1.4 Critical friends share their experiences with the group.</li> </ul>	
	1.5 <u>Ask tutors to tell how</u> <u>students will be</u> <u>prepared to employ</u> <u>relevant teaching,</u> <u>learning and</u> <u>assessment</u> <u>strategiesduring the</u> <u>basic school classroom</u> <u>work in STS in year 4</u> <u>semester 1. (Collect a</u> <u>few examples for</u> <u>discussion)</u>	1.5 T <u>ell how students will</u> <u>be prepared to employ</u> <u>Relevant teaching,</u> <u>learning and assessment</u> <u>Strategies during the</u> <u>basic school classroom</u> <u>work in STS in year 4</u> <u>semester 1.</u>	
	<ul> <li>1.6 Ask tutors to read the introductory sections of Lesson 12 (including LOs and LOs) and discuss in pairs the important or distinctive features of the lesson.</li> <li><i>Refer to your respective TVET manuals.</i></li> </ul>	<ul> <li>1.6 Read the introductory sections of lesson 12 (including LOs and LOs) and discuss in pairs the important or distinctive features of the lesson.</li> <li><i>Refer to respective TVET course manuals</i></li> </ul>	
<ul> <li>2. Concept <ul> <li>Development</li> <li>(New learning</li> <li>likely to arise in</li> <li>lesson/s):</li> </ul> </li> <li>Identification and</li> </ul>	2.1 Ask tutors to read and discuss the new learning of lesson 12. e.g. Agriculture	<ul><li>2.1. Identify and discuss the new learning of lesson 12.</li></ul>	15 mins
discussion of new learning,	Reflection on this course		

potential barriers	Home Economics	
to learning for	Review of course	
student teachers	work	
or students,		
concepts or	Technical	
pedagogy being	Review of course	
introduced in the	work	
lesson, which need to be	Marketing of product     or service	
explored with the		
SL/HoD	Visual Art	
NB The guidance for	Reflection on this	
SL/HoD should set	course	
out what they need	Display/Exhibition	
to do to introduce	and Sharing of	
and explain the issues/s with tutors	Graphic Design items	
	<ul><li>(II).</li><li>Display / Exhibition</li></ul>	
	Display / Exhibition     and Sharing of	
	Pictures (II)	
	Appreciation,	
	appraisal and	
	criticism of artworks	
	2.2. Ack tutors to discuss	
	2.2 Ask tutors to discuss potential barriers to	2.2. Discuss potential barriers to learning for
	learning for student	student teachers or
	teachers, e.g.	students, <i>e.g.</i>
	Difficulty of student	Difficulty of student
	teachers with SEN	teachers with SEN
	undergoing exhibition	undergoing exhibition
	process.	process.
	<ul> <li>Some tutors and student teachers many</li> </ul>	<ul> <li>Some tutors and student teachers many</li> </ul>
	find art exhibitions a	find art exhibitions a
	difficult work because	difficult work because
	it involves a lot of	it involves a lot of
	planning and work.	planning and work.
	Some student teachers	Some student teachers
	• Some student teachers and tutors may not see	and tutors may not see
	• Some student teachers and tutors may not see the importance of	and tutors may not see the importance of
	• Some student teachers and tutors may not see the importance of reviewing the	and tutors may not see the importance of reviewing the work of
	<ul> <li>Some student teachers and tutors may not see the importance of reviewing the semester's work but</li> </ul>	and tutors may not see the importance of reviewing the work of the semester but there
	• Some student teachers and tutors may not see the importance of reviewing the	and tutors may not see the importance of reviewing the work of
	<ul> <li>Some student teachers and tutors may not see the importance of reviewing the semester's work but there can be gaps</li> </ul>	and tutors may not see the importance of reviewing the work of the semester but there can be gaps which

	<ul> <li>Some student teachers may have the fear of others condemning their words during appreciation and criticism of artefacts.</li> <li>Some tutors may have problem following the assessment procedure for final products of student teachers, etc.</li> <li>Solution:         <ul> <li>Plan and execute Exhibition as a team work so that no one may be stressed up</li> <li>Plan and apportion the work according to abilities</li> <li>Educate the community about the importance of the Exhibition, etc.</li> </ul> </li> </ul>	<ul> <li>Some student teachers may have the fear of others condemning their words during appreciation and criticism of artefacts.</li> <li>Some tutors may have problem following the assessment procedure for final products of student teachers, etc.</li> </ul>	
3. Planning for teaching, learning and	3.1. Ask tutors to read and discuss the teaching and learning activities	3.1. Read and discuss the teaching and learning activities in lesson 12,	40 mins
assessment activities for the	<ul><li>in lesson 12,</li><li>e.g. Interactive lecture</li></ul>	• e.g. Interactive lecture	
lesson/s	• Think-Pair-Share	• Think-Pair-Share	
<ul> <li>Reading and discussion of the</li> </ul>	Reflective Practice     Exhibition	Reflective Practice     Exhibition	
teaching and	<ul> <li>Exhibition,</li> <li>Hands-on approach,</li> </ul>	<ul> <li>Exhibition,</li> <li>Hands-on activity,</li> </ul>	
learning activities.	<ul> <li>Group discussion, etc.</li> </ul>	<ul> <li>Group discussion, etc.</li> </ul>	
<ul> <li>Noting and addressing areas where tutors may require clarification.</li> <li>Noting opportunities for</li> </ul>	3.2. Ask tutors to identify and address areas that may require clarification. e.g. How organise Exhibition of student teachers' works.	3.2. Identify and address areas that require clarification. <i>e.g. How</i> organise Exhibition of student teachers' works.	
making links to the Basic School	Refer PD session 11, 3.6	Refer PD session 11, 3.6	
Curriculum			

**Career Technology** Curriculum in the JHS integrating: GESI responsiveness Curriculum in the JHS and how the delivery and ICT and 21<sup>st</sup> C and how the delivery method(s) will enhance skills method(s) will enhance student teachers' • student teachers' performance during Reading, discussion, and performance during their STS, e.g. the identification of their STS, e.g. the relationship between relationship between exhibition, continuous exhibition, appreciation appreciation and assessment criticism of artefacts in and criticism of opportunities in artefacts in lesson 12 lesson 12 as in JHS the lesson. Each lesson should as in JHS Career Career Technology include at least Technology Curriculum. Curriculum. two NOTE: inform tutors to NOTE: inform tutors to opportunities to use continuous group student teachers group student teachers assessment to to discuss the topics in to discuss the topics in support student the career Technology the career Technology and present their and present their teacher learning findings through power findings through power Resources: point point o links to the existing PD 3.4. Ask tutors to identify 3.4. Identify opportunities Themes, for opportunities for for integrating GESI, example, integrating GESI, ICT ICT and 21<sup>st</sup> Century action and 21<sup>st</sup> Century skills skills into the lesson, research, into the lesson, e.g. student teachers questioning should present their and to other e.g. student teachers external should present their project reports through project reports through reference power point. power point. Student teachers should material: Student teachers be encouraged to literature, on should be encouraged display their end of web, Utube, to display their end of semester works on the physical semester works on the College website. resources, *College website.* Persons with SEN / power point; Persons with SEN / female students who how they female students who have displayed high should be have displayed high performance in their used. performance in their project be appreciated Consideration project be appreciated for good work done. needs to be for good work done. given to local availability NB o guidance on Remind tutors that any power successful use of digital point technologies is a key factor presentations,

<ul> <li>TLR or other resources which need be developed to support learning</li> <li>Tutors should leaped to ha a plan for the next lesson for student teached</li> </ul>	Development Goals. to d 3.6. Guide tutors to identify TLRs and other resources needed for lesson 12, e.g. ve Pictures, Textile products, cameras projectors, smart	3.6. Identify TLRs and other resources need for Lesson 12. <i>e.g.</i> <i>Pictures, Textile</i> <i>products, cameras</i> <i>projectors, smart</i> <i>boards, studio,</i> <i>workshops, physical</i> <i>environment, Mobile</i> <i>Phones, laptop</i> <i>computer, Internet</i> <i>facility etc.</i>	
<ul> <li>4. Evaluation and review of session:</li> <li>Tutors should Identifying critical friends observe lesson and report at next session.</li> <li>Identifying and addressing any outstanding issues relating the lesson/s fo clarification</li> </ul>	the course and PD manuals for the next semester.	<ul> <li>4.1 Identify any outstanding issues relating to this lesson for clarification.</li> <li>4.2 Read the course and PD manuals for the next semester.</li> </ul>	15 mins

### Appendix 1: The PD session check list: supporting B.Ed. implementation. In some cases, to support implementation the PD sessions may need to add more detail to what is in the course manuals

What to Include in PD sessions: Check list	Checked and In Place.
Course introductions and conclusions	
• The first PD session of each semester introduces the course manual/s and	
course expectations to student teachers.	
• The final PD session provides the opportunity to review student teachers	
learning from the course	
Prior knowledge: Points for tutors on assessing or activating student teachers' prior knowledge.	
Basic School Curriculum: when topics for student teachers are from the Basic	
School Curriculum the PD session makes explicit links.	
CLO: relevant to the session to be introduced	
Lesson Learning outcomes and indicators. PD sessions provide opportunities	
for tutors to model interactive approaches to teaching and learning they will	
use to support student teachers	
Integration of subject specific content and subject specific pedagogy. This is	
modelled in PD sessions through activities for tutors. Any potentially new or	
challenging concepts are explored with tutors	
Subject Specific Training. Where subjects have been grouped together for the	
PD sessions, tutors are guided to activities in the subject course manuals to	
ensure the PD is not generic. Where appropriate there is direct page or point	
references to activities in each of the relevant subject course manuals.	
Integrating GESI: each PD session explicitly highlights at least two (2) teaching	
and learning activities from the course manual/s which should be used to	
promote student teachers' understanding of GESI responsiveness and support	
the inclusion of all pupils.	
Assessment. Integrating and embedding NTEAP practices	
PD sessions include at least two continuous assessment opportunities which	
will support tutors in developing student teacher's understanding of and	
ability to apply assessment for or as learning.	
Phase Specific Training. Tutors are guided to specific activities in the relevant	
phase course manuals for EG, UP and JHS. Tutors are advised to group student	
teachers according to the phase they are training for specific activities.	
Building in STS. STS tasks are integrated into the PD sessions. Preparing for	
work in school and opportunities for tutors to draw on what student teachers	
are learning in school by, for example, targeting observations linked directly to	
the themes in the course manuals.	
Building in activities which support the development of 21c skills in particular	
the use of ICT. The development of these is integrated into the PD sessions	
including the use of ICT to support learning. Each PD session should include at	

least two (2) examples of students being required to use ICT to extend their learning.	
Resources /TLM. Where specific resources are required, it is clear where tutors can access them e.g., videos, online resources or readings.	

	Appendix 2. Course A	Assessment Components briefly
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001400110		
COMPONENT	SUBJECT PROJECT 1 per course per semester, individual or collaborative student teacher work.	SUBJECT PORTFOLIO 1 per course per semester, individual or collaborative student teacher work.
WHAT IS IT?	The Subject project is an assignment designed to enable student teachers to demonstrate achieving one or more of the CLOs, progress towards achieving identified NTS, development of knowledge and understanding of: the Basic School Curriculum, GESI responsiveness, using ICT mand 21stC skills	<b>The Subject Portfolio</b> is the deliberate collection of student teachers' work that has been selected and organized for a particular subject to show student teacher's learning and progress to achieving the CLOs through examples of his or her best work.
CONSTITUENTS	Introduction: a clear statement of aim and purpose Methodology: what the student teacher has done and why to achieve the aim and purpose of the project Substantive or main section: Presentation of any artifacts, experiments, TLMs created for the project; presentation, analysis, and interpretation of what has been done, learned, or found out in relation to focus of the project. Conclusion: Statement of the key outcomes of the project; reflection on what the student teacher has learnt	3 items of work produced during the semester selected by student teachers with tutor support during the semester as best examples of their progress and 200- word reflection on the items* Or 2 items of work and A mid semester assessment: case study, reflective note, quiz. * For each item they select, Student teacher's need to reflect on progress against identified NTS; achieving CLOs; increased knowledge and understanding of the Basic School Curriculum, GESI responsiveness, integration of ICT and how they could have approached developing the item differently to achieve a better outcome
WEIGHT	Overall weighting of project = 30% Weighting of individual parts of project out of 100 • Introduction – 10 • Methodology – 20 • Substantive section – 40 • Conclusion – 30	Overall weighting of project = 30% Weighting of individual parts of portfolio out of 100 i(a). Each of the three (3) items selected by the student teacher is 30 % (90%). i(b) Presentation and organization of portfolio 10%. OR ii(a). Each of the two (2) items selected by the student teacher is 30 % (60%). ii(b)Mid semester assessment 30% ii(c)Presentation and organization of portfolio 10%
EXAM	portfolio 10%End of semester Exam, weight 40%. To assess: achievement of one or more of the CLOs, progress towards achieving identified NTS, development of knowledge and understanding of the Basic School Curriculum, ability to use GESI responsive approaches and to integrate ICT and 21 <sup>st</sup> C skills in teaching and learning	

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T-TEL Support Team		
Professor Jophus Anamuah-Mensah	T-TEL – T-TEL Board Chair	
Professor Jonathan Fletcher	T-TEL – Key Advisor, Teaching & Learning Partnerships	
Bea Noble-Rogers	T-TEL – International Teacher Education Curriculum Expert	
Dr. Sam Awuku	T-TEL – Key Advisor, Leadership for Learning &	
	Institutional Development	
Dinah Adiko	T-TEL – Key Advisor, Gender Equality and Social Inclusion	
Beryl Opong-Agyei	T-TEL – National Teacher Education Coordinator	
Marjorie Tackie	T-TEL – Gender Equality and Social Inclusion Coordinator	
Hawa Nindow	T-TEL – Education Advisor	
Peter Chammik Jayom	T-TEL – Education Advisor	
Wilhemina Gyamfi	T-TEL – Education Advisor	
Issahaku Abudulai	T-TEL – Education Advisor	
Victor Sunkwa Asamoah	T-TEL – Education Advisor	
James Adefrah	T-TEL – Education Advisor	
Roger Kwamina Aikins	GM – Commercial (Oversees design, print and distribution)	

#### SUBJECT WRITING TEAM

SUBJECT	NAME	INSTITUTION
Mathematics	Prof. Gabriel Asare Okyere	Kwame Nkrumah University of Science and
		Technology, Kumasi
	Eric Abban	Mt. Mary College of Education, Somanya
	Eric Kwame Austro Gozah	Dambai College of Education Dambai
	Akuffo Frank Assah	University for Development Studies, Tamale
French	Dr Stella Afi Makafui	Kwame Nkrumah University of Science and
	Yegblemenawo	Technology, Kumasi
	Osmanu Ibrahim	Mt Mary College of Education, Somanya
	Felix Asare Odonkor	University of Education, Winneba
Language and	Prof. Charles Owu-Ewie	University of Education, Winneba
Literacy	Dr. Abraham Okrah	University of Ghana, Legon Accra
	Dr. Kwesi Adomako	University of Education, Winneba
	Abdul-Moomin Abdul-Aziz	Nusrat Jahan Ahmadiyya College of Education,
		Wa
	Comfort Dorvlo	Accra College of Education, Accra
	Freda Asante-Kumi	Accra College of Education, Accra
	Awudu Rafick	University for Development Studies, Tamale
PEMD	Justice Gideon Adjerakor	University of Education, Winneba
	Godfred Teye Mensah Akuffo	Bia Lamplighter College of Education, Sefwi
		Debiso
	Philemon D.K. Agbenyega	Dambai College of Education, Dambai
	Dr Emmanuel Osei Sarpong	University of Education, Winneba

Pedagogy	Dr Winston Kwame Abroampa	Kwame Nkrumah University of Science and Technology, Kumasi
	Dr. Maxwell Kwesi Nyatsikor	University for Development Studies, Tamale
	Dr John Sedofia	University of Ghana, Legon Accra
	Fadilata Seidu	Nusrat Jahan Ahmadiyya College of Education, Wa
	Kweku Essia Donkor	University of Education, Winneba
	Dr Nyadu Offei	University of Education, Winneba
	John Aditorem	Tumu College of Education, Tumu
Science	Prof Rueben Yao Tamakloe	Kwame Nkrumah University of Science and Technology, Kumasi
	Maxwell Bunu	Ada College of Education, Ada
	Valentina Osei-Himah	Atebubu College of Education, Atebubu
	Comfort Korkor Sam	University for Development Studies, Tamale
	Ambrose Ayikue	St. Francis College of Education, Hohoe
ICT	Victoria Boafo	Mampong Technical College of Education, Ashanti Mampong
	Richard Adusei	University for Development Studies, Tamale
	Paul Mensah	St. Louis College of Education, Kumasi
TVET	Rev. Dr. Nyuieko Avotri	Former Principal, Mampong Technical College
		of Education, Ashanti Mampong
	Michael Eco Adixey	Akatsi College of Education, Akatsi
	Rev Godwin Gbadagba	Dambai College of Education, Dambai
	David Ankutse	Accra College of Education
	Grace Annagmeng Mwini	Tumu College of Education
	Rejoice Makafui Tsotorvor	Akatsi College of Education, Akatsi
Social	Dr Dacosta Aboagye	Kwame Nkrumah University of Science and
Sciences		Technology, Kumasi
	Dr. Mohammed Adam	University of Education, Winneba
	Tia Yahaya	Tamale College of Education
	, Stephen Koomson	St Vincent College of Education
	Joseph Mihaye	Accra College of Education
	Ibrahim Abudulai	Gambaga College of Education
	Limpu Isaac Digbun	Bagabaga College of Education
	Felix Dongballe	McCoy College of Education
	Burukum Achor	Dambai College of Education
	Mercy Sarpong Mintah- Botchey	Presbyterian College of Education, Akropong
	Salifu Fawzi Rahaman	Nusrat Jahan Ahmadiyya College of Education, Wa

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