

Four-Year B.Ed. Course Manual

Pedagogy: Differentiated Assessment









GOVERNMENT OF GHANA









FOREWORD

These Initial Teacher Education course manuals were developed by a team consisting of members from Colleges of Education and four universities namely the University of Ghana, Kwame Nkrumah University of Science and Technology, University of Education, Winneba, and University for Development Studies. This team was originally constituted by the National Council for Tertiary Education (now the Ghana Tertiary Education Commission) in 2019 to support the delivery of the new B.Ed. curriculum with assistance from T-TEL and UK Aid. The revision, finalization and printing of these manuals took place in 2021 with support from T-TEL and Mastercard Foundation.

The course manuals have been produced for use as general guides for the delivery of the new four-year B.Ed. curriculum in Colleges of Education in collaboration with their affiliated universities. They are designed to support student teachers, tutors, and lecturers in delivering a complete B.Ed. course for training student teachers which meets the requirements of the National Teachers' Standards, enabling them to teach effectively in basic schools.

The first section of the manuals is focused on the course information and vision for the B.Ed. curriculum. The second section presents the course details, goal for the subject or learning area, course description, key contextual factors as well as core and transferable skills and cross-cutting issues, including equity and inclusion. The third section is a list of course learning outcomes and their related learning indicators. The fourth section presents the course content which is broken down into units for each week, the topic and sub-strands and their related teaching and learning activities to achieve the learning outcomes and the teaching and learning strategies. This is followed by course assessment components in section five. Each manual contains a list of required reading and references as well as teaching and learning resources. The final section presents course related professional development for tutors and lecturers to be able to use each section of the manual.

Field instructions to guide Supported Teaching in School are integrated into the course manuals to provide the student teacher with guidance in developing teaching throughout the entire period of study to be able to meet the requirements of the National Teachers' Standards (NTS) and the National Teacher Education Curriculum Framework (NTECF). To ensure maximum benefit the course manuals should be used in addition to other resources such as the NTS, NTCEF, National Teacher Education & Assessment Policy and the National Teacher Education Gender Equality and Social Inclusion (GESI) Strategy and Action Plan.. This will help to ensure that student teachers' learning is integrated within the wider teacher education policy framework.

Professor Mohammed Salifu

Director General, Ghana Tertiary Education Commission

ACKNOWLEDGEMENTS

The course manuals were developed through the collaborative efforts of a team of individuals from Colleges of Education, University of Ghana, Kwame Nkrumah University of Science and Technology, University of Education, Winneba, and University for Development Studies. They were produced in association with the Ghana Tertiary Education Commission of the Ministry of Education, Ghana.

A participatory team approach was used to produce this set of resources for tutors/lecturers, mentors, and student teachers. We are grateful to the specialists who contributed their knowledge and expertise.

Special thanks to Professor Jophus Anamuah-Mensah - T-TEL Key Advisor, Dr. Eric Daniel Ananga - T-TEL Key Advisor for Curriculum reform and Beatrice Noble-Rogers who provided key editorial, review and content input and facilitated the process of drafting and finalising the course manual.

Patricia Appiah-Boateng and Gameli Samuel Hahomene, served as typesetting and formatting coordinators and designed and produced the illustrations, tables, and other graphics which appear in the pages. They spent time and effort designing and redesigning the graphic layout and producing the camera-ready copy resulting in a set of materials that are easy to use, read, and reference.

Thanks also goes to all T-Tel staff members who worked to support production of these course manuals, particularly Beryl Opong-Agyei and Gideon Okai. Their frankness and co-operative attitude complimented the team approach used to produce this manual.

We are indebted to the Ministry of Education and the Ghana Tertiary Education Commission (GTEC) for the general support and specific helpful advice provided during production of the course manuals. Recognition and thanks must go to Chief Technical Advisor for T-TEL and Policy Advisor to the National Education Reform Secretariat, Akwasi Addae-Boahene, Prof. Mohammed Salifu, the Director General of GTEC and Mr. Jerry Sarfo the coordinator for the colleges of education, who in diverse ways supported during the course manual writing workshops.

In addition to all the staff who participated visibly in the development of these materials we would like to acknowledge all those people from the many colleges of education and universities in which we have worked who have, directly or indirectly, shared their views on the curriculum with us.

CORE WRITING TEAM

Names of writers	Subject	Names of writers	Subject
Dr. Isaac Eshun		Cletus Ngaaso	Social Studies
Dr. Anthony Baabereyir		Mohammed Adam	
Ms. Shirley Dankwa	African Studies	Dr. Emmanuel Adjei-Boateng	
Prof. S.Y. Annor	Agriculture	Dr. Yaw Nyadu Offei	Special Education
Dr. Salome praise Otami		Prof. Samuel Hayford	
Dr. Samuel Frimpong		Dr. Awuni	
Robert Quansah	Early Grade	Rev.(Dr) Nyueko Avotri	Technical Vocational
Dr. Abraham Kwadwo Okrah	English Language	Elizabeth Lani Ashong	Education and Training
Dr. Sarah Emma Eshun	- English Language	Michael Tsorgali	. ITallillig
Vivian Acquaye Felix A. Odonkor		Frnacis Donkor	
Dr. Cecilia Esinam Agbeh		Dr. Maxwell Nyatsikor	
Ibrahim Osmanu	French	Prof. Salomey Essuman	
Dr. Kofi Adu-Boahen		Dr. Paul Kwadwo Addo	
Dr. M. Kusimi		Dr. Winston Kwame Abroampa	
Dr. Aboagye Dacosta	-	Mr. Kwaku Esia-Donkoh	
Mr. Alexander Otoo	Geography	Mohammed Z. Abdulmumin	Pedagogy
Dr. Yvonne A.A. Ollennu	Ghanaian	Dr. Mohammed Hafiz	Arabic
Kwasi Adomako	Language	Iddris Mohammed	
Dr. Akwasi Kwarteng Amoako-Gyampah		Mohammed Almu Mahaman	
Anitha Oforiwah Adu- Boahen		Murtada M. Muaz	
Gertrude Nkrumah	History	Dr M. Q. Adjahoe	Music
Prof Charles Owu-Ewie	Literacy	Prof Cosmas Mereku	
Dr. Ahmed Amihere		Prof. Reginald Ocansey	Physical Education
Zakaria Sadiq	Mathematics	Dr. Emmanuel Osei Sarpong	
Dr. R. Addai-Mununkum	RME	E. Kwaku Kwaa-Aidoo	ICT

INTRODUCTION TO COURSE MANUALS

Welcome to this B.Ed. Course manual.

Following the accreditation of the B.Ed. by the national accreditation Board with its recognition as a world class teacher education curriculum, the decision was taken to support effective implementation through the development of course manuals. the course manuals provide tutors and lecturers with the materials necessary to support teaching each of the B.Ed. courses. The manuals adhere directly to, and emphasise, the principles and standards set out in the NTS, NTECF and in the B.Ed. and will help ensure operationalising the Government's teacher education reform Policy.

The manuals serve the following purposes:

- they are the key educational agreements between the training institution and the student teachers. In this way student teachers know what the expectations are for them and for the training they will receive.
- they lay out the course outcomes, content, strategies, and assessment, thereby providing direction to and consistency in training and B.Ed. implementation among tutors across the country.
- they are explicit documents that provide other institutions with information on which to base transfer/ articulation decisions.

Specifically, they also:

- support coherent lesson planning and teaching which will enable student teachers to achieve the NTS and become good teachers who ensure all pupils' learning whilst offering tutors the flexibility for adaptation for local needs and contexts.
- Provide a lesson by lesson overview of the course, building on and developing the material in the course specifications.
- Inform tutors, student teachers and others working with student teachers about:
 - 1. What is to be taught and why.
 - 2. how it can be taught.
 - 3. how it should be assessed.
- Provide opportunities for student teachers to develop and apply knowledge during supported teaching in school, creating a strong bond between learning in school and in the training institution.
- Reflect the stage of student teacher development, set out in the model for progress across the four years
 of the B.Ed.
- Can be used as self-study tools by student teachers.
- Ensure that all information necessary to inform teacher training is in one place (serves as reference document).
- The manuals are the basis of the codes and university professional development sessions to ensure Principals, tutors, lecturers and heads of department are fully familiar with the details of: courses, outcomes, content, approaches, assessments and lessons.

Who are course manuals for:

- College of Education Tutors
- Teacher Education University Lecturers
- Student Teachers
- Mentors and Lead Mentors
- All Those with An Interested In Teacher Education.

USING THIS MANUAL

Writers of the manuals engaged widely with colleagues in each subject area at each stage of development. Besides, writers envisaged themselves in varied contexts as they wrote, to suggest methodologies and strategies for teaching the strands which would ensure student teachers are enabled to achieve the learning outcomes. In view of our commitment to creativity, problem solving, collaboration and to lifelong learning, we expect that individual tutors will "own" their manuals and become user-developers. lessons in the manuals will be strands for weekly Pd meetings where tutors/lecturers will situate the lessons in the contexts of their colleges and their student teachers, to maximize the benefits.

It is also expected that tutors will model the best pedagogic practices for student teachers. Key among such practices is the communication of the importance of having a personal teaching philosophy. We expect that tutors and lecturers will explicitly communicate their personal teaching philosophies to their student teachers during the first meeting of every course. in preparation for this, we suggest you set out your personal teaching philosophy and how it will be demonstrated in your teaching using, or adapting, the sample sentence introductions below.

My teaching philosophy is	
In view of this philosophy, I will facilitate this course by/through	

PEDAGOGY 1

CONTEXT

Learners are assessed for varied purposes including placement, diagnostic and selection. There is therefore, the pivotal need for all student teachers meant for teaching at the primary school level to be abreast of, and equipped with knowledge of the various assessment formats. In many cases much emphasis is placed on traditional assessment modes and objective based assessment to the neglect of authentic or performance assessment. Differentiated assessment to meet varying learning strengths and needs of primary school learners becomes indispensable.

Course Title	Differentiated Assessment for Primary Schools								
Course Code	Course Credit value: 3 Semester 2						er 2		
	Level: 200								
Pre-requisite	Introduction to School based Inquiry, Differentiated Learning and Curriculum Planning								
Course	Face-to-	Practi	Work-	seminars	Indepe	ndent	e-learnin	ng	Practicum: []
Delivery		cal	based	[٧]	Study:		opportu	_	
Modes		activi	learning [√]		,				
	1	ty[√]							
Course Description for significant learning (indicate NTS, NTECF, BSC GLE to be addressed)	The course is designed to expose student teachers to basic concepts and principles of differentiated assessment of primary school learners as well as managing transition from Upper Primary through to the junior high school level. It is also structured to enable them identify and apply the various forms and types of assessment to address the needs of diverse learners in order to meet the grade level expectations and national assessment benchmarks. Student teachers will also be guided to examine various processes involved in planning and administering assessment in inclusive learning settings and interpret results for instructional decision making. Current naturalistic or authentic assessment processes, assessment tools and building digital and manual portfolios will be explored. In this course, student teachers will be engaged using varying interactive techniques such as demonstrations, play and other age/grade level activities. They will be assessed through, portfolio, projects and assignments among others. These are meant for students teachers to acquire a repertoire of knowledge and skills to enable them apply appropriate techniques, processes and procedures to gather relevant data from differently abled middle childhood learners in inclusive and multi-grade setting in order to support their learning. The course will also explore issues within the context of Ghanaian core values, critical thinking, honesty, commitment and passion, creativity								
			rosscutting issu			_			ers' Standard: 1c, 1e,
Course			letion of the c	-		Indicator			
Learning	teachers wo	uld be a	able to:						
Outcomes	principles of concepts in a measuremer	differei assessm at and e	knowledge, untiated assessrent such as as valuation and , 31, 3p; NTECF	nent, basic sessment, te the purposes	sting,	Expla such evaluasses Diffe	ssment ain the char as assessm action, as w ssment.	racteristic nent, test vell as the nong asse	f differentiated as of basic concepts ameasurement, and a purposes of assment, test, ation.
	use of assess learning thro	ment fo	knowledge, up or learning/of l ojects (NTECF;	earning and NTS 3k, 3l, 3	as m, 3p) .	IdentExamlearrproje	ify the typ nine what o ing/of lear ects.	es of asse onstitute ning and	essments s assessment for as learning through
	CLO 3. demonstrate knowledge and understanding of the grade level expectations and assessment benchmarks for basic schools in Ghana(NTS 3g, 3k, 3l, 3p;NTECF). Outline the grade level expectations for middle childhood learners. Discuss the grade level expectations and assessment benchmarks for upper primary graders in Ghana.							rs. xpectations and for upper primary	
	comprehensi and outcome learning in le	ive and es in rel earning	understanding appropriate le ation to the va plans(NTECF; I	arning objectrious domain	ns of o).	objection object	ctives. Inlate compliant of the complian	prehensiv ves and c nains of le	re and appropriate outcomes in line with earning in learning
			understanding r constructed						for constructed test by type) for a selected

	selected topic, and design a table of specification (NTECF; NTS 3f, 3l). CLO 6. demonstrate understanding and use of procedures for planning inclusive classroom tests and assessments(NTECF; NTS 3f, 3g). CLO 7. demonstrate understanding, planning and developing authentic/ performance assessment tasks, considering gender and learners with diverse strengths in inclusive and multi-grade classrooms (NTECF; NTS 3k, 3l, 3p). CLO 8. demonstrate understanding and use of norm-referenced and criterion-referenced modes of interpreting tests and manage data gathered on various aspects of the learners (NTS 3p).			 topic. Design a table of specification and a scoring guide. Discuss the procedures for planning inclusive classroom tests and assessments. Apply the procedures for planning and designing inclusive classroom tests and assessments. Explain authentic/performance assessment and discuss the characteristics of the types of authentic/performance assessment tasks. Plan and develop authentic/performance assessment tasks for inclusive and multi-grade classrooms. 8.1 Collect data on various aspects of learners with different tools, analyse and use results to support learning of diverse learners. 8.2 Design differentiated assessment for learners with SEN in inclusive settings. 8.3 Demonstrate how norm-referenced and criterion-referenced modes of interpreting tests are used. 			
	Units	Topics:	Sub-topics (if		Teaching and learning activities to achieve learning outcomes		
Course Content: Differentiated Assessment in Basic Schools	1	Definition of terms and nature of assessment	differentiated test; measure evaluation; fo	ement and ormative and valuation; scale	of Tutor-led discussions on definition and nature of assessment; Individual and group presentations on nature		
	2	Principles, forms and purposes of assessment	General principles of assessment, purposes of assessment; Assessment of Learning (AoL), Assessment as Learning (AaL), Assessment for Learning (AfL);		assessment, purposes of assessment; Assessment of Learning (AoL), Assessment as Learning (AaL), Assessment for		t as group presentations on
	3	Types of assessment	Formative assessment; summative assessment; diagnostic assessment; performance assessment; types of formative and summative assessment; characteristics, merits and demerits of continuous assessment; school-based assessment; standards-based assessment; national assessment benchmarks; grade level expectations for basic education in Ghana		Tutor-led discussion on types of assessment; Group presentation and discussion on characteristics, merits and demerits of continuous assessment; Concept mapping/cartooning on schoolbased, standards-based assessments, and national assessment benchmarks; Tutor-led discussion on grade level expectations for basic		

	4	Taxonomies of educational objectives (revised version by Anderson and Krathwohl, 2001)	The concept of learning outcomes; behavioural objectives; learning objectives; cognitive domain objectives, affective domain objectives and psychomotor domain objectives; the profile dimensions	Tutor-led and student-led discussions on the concept of learning outcomes and types of objectives; Individual and group presentations on cognitive, affective and psychomotor domains; Individual and group projects to design taxonomies of educational objectives.			
	5	Item formats	Types of Objective-type tests and essay-type tests; developing tables of specification and scoring guides	Tutor led discussions on types of objective-type-test; Talk for learning approach for types of essay-type test; Individual and group projects on developing tables of specification, test items and scoring guide.			
	6	Planning classroom tests and assessment	Types of achievement tests and characteristics; constructing, assembling, administering and appraising of tests	Talk for learning approach for types and characteristics of achievement tests; Tutor-led and student-led demonstrations on constructing, assembling, administering and appraising test items; Reflective notes on planning classroom tests and assessment.			
	7	Assessment procedures for inclusive classrooms	The concept authentic/performance assessment; principles of fair assessment; learning stories approach, socio-cultural approach; using types of observation, check lists, rating scales, clinical interviews, conversation, gallery work; project development; task analysis; building portfolios	Concept mapping/cartooning for meaning and characteristics of the types of authentic or performance assessment; Group presentations of how to plan and develop authentic/performance assessment tasks for inclusive and multi-grade classrooms.			
	8	Data presentation and Interpretation of tests and authentic assessment data	Descriptive statistics; Norm- referenced and criterion criterion-referenced interpretation of data; validity and reliability issues; types of feedback and how to use feedback	Tutor-led discussion on interpretation of results from norm-referenced and criterion-referenced tests; Student-led demonstration on how norm-referenced and criterion-referenced modes of interpreting tests are used			
Course	¹ Component 1: S	Subject Portfolio Assess	ment (30% overall score)				
Assessment			(3 of them -10% each) = 30%				
(Educative assessment:		n assessment = 20% ve Journal = 40%					
of, for and as learning)			folio = 10% (how it is presented /o	rganised)			
	NOTE Review the upper primary basic school curriculum, create a wall chart which maps out the grade level expectations and assessment bench marks for UP students, focus on the core subjects of English maths and science. Write a short report which demonstrates your understanding of what these mean in practice for the P5 teacher. Weighting: 30% Assesses Learning Outcomes: CLO 1 CLO 2 and CLO 3						

 $^{^{1}\}mbox{See}$ rubrics on Subject Portfolio Assessment in Annex 6 of NTEAP

	² Component 2: Subject Project: (30% overall semester score)
	 Introduction, a clear statement of aim and purpose of the project = 10%
	Methodology: what the student teacher has done and why to achieve the purpose of the project =
	20%
	• Substantive or main section = 40%
	• Conclusion = 30%
	NOTE
	Peer assessment of group projects and presentations writing objectives across domains, designing table of
	specification and writing test items on selected topics in their specialisms, demonstration and
	individual/group presentations on planning, conducting and interpreting tests in inclusive and multi-grade
	classroom(soft skills to be developed include: honesty, digital literacy, respect for diversity, critical thinking)
	Assesses Learning Outcomes: CLO 4 CLO 5 CLO 6 CLO 7
	Component 3: End of Semester Exams 40%
	NOTE
	Summary of Assessment Method: End of semester examination on nature of assessment, principles,
	purposes and types of assessment; designing table of specification and writing test items; conducting and
	interpreting tests.
	Weighting: 40%
	Assesses Learning Outcomes: CLO 1,2,3,4,5,6,7,8
	TESSA Online Educational Resources (<u>www.tessafrica.net</u>)
	2. T-TEL Modules (<u>www.t-tel.org</u>).
	3. Other Relevant Online Resources (<u>www.Tess-india.net</u> , <u>www.oerafrica.org,www.futureLearn.com</u> ,
	www.telmooc.org, www.col.org, Khan academy)
	4. The iBox (CENDLOS) 5. YouTube
Required Text	Asamoah-Gyimah, K., &Anane, E. (n.d.). Assessment in basic schools. Cape Coast. Institute of Education.
	Eshun, P., &Effrim, P. K. (2008). <i>Basics in measurement, evaluation and statistics in education</i> . Cape Coast:
(Core)	Yaci Publications
	Tamakloe, E. K. Amedahe, F. K., & Atta, E. T. (2005). <i>Principles and methods of teaching</i> . Accra: Black Mask
	Ltd
Additional	Alonge, M. F. (2004). <i>Measurement and evaluation in education and psychology</i> (2nd ed.). Ado-Ekiti:
Reading List	Adedogo Pub. Co.
incauling List	Anastasi, A. (1982). <i>Psychological testing</i> (6th ed.). New York: Macmillan Publishing Inc.
	Archer, F. K. (2002). Measurement and evaluation in education. Kumasi: Paks.
	Burke, J. & Larry, C. (2008). Educational research: Quantitative, qualitative, and mixed approaches. New
	York: Sage Publication.
	Total Sage rubication.

Carey, L. M. (2001). *Measuring and evaluating school learning*. Boston: Allyn Bacon. Gronlund, E. (2003). *Assessment of students' achievement*. (7th ed.). Boston: McGrawHill. Nitko, A. J. (2001). *Educational assessment of students* (3rd ed.). New Jersey: Prentice-Hall.

Onivehu, A. O. & Amoah, S. A. (2002). Essentials of measurement and evaluation. Accra: K. 'N' B. Publishers.

 ${}^2\!See$ rubrics on Subject Project Assessment in Annex 6 of NTEAP

Year of B.Ed. 2 Semester 1 Place of lesson in semester 1 2 3 4 5 6 7 8 9 10 11 12

Title of Lesson	Principles and nat	ure of differ	entiated as	sessment	Lesson Du	ration	3 Hours			
Lesson description	The lesson is mea	nt to prepare	e student t	eachers to d						
zessen desemption	The lesson is meant to prepare student teachers to demonstrate knowledge and understanding of the principles of differentiated assessment and basic concepts in assessment such as									
		assessment, testing, measurement and evaluation and the purposes of assessment. It aims to assist them to apply these principles to assesses students in different context and prepare them								
				ssesses stud	ents in differer	it context and pre	epare tnem			
Previous student teacher		or the Junior High School education. Student teachers have observed their mentors assessing students during supported teaching in								
knowledge, prior	schools.									
learning (assumed)	This first lesson	introduces	student te	achers to t	the course lea	rning outcomes	and the 3			
	assessment comp									
Possible barriers to	Student teachers			ictically invo	lved in assessr	nent during the S	TS and may			
learning in the lesson	have misconcepti									
	The have also take appreciate the dif						enable them			
Lesson Delivery – chosen		Practical	Work-	Seminars	Independent		Practicum			
to support student		Activity	Based	[\]	Study	opportunities				
teachersin achieving the	' '		Leaning		[\dagger]	[\dagger]				
outcomes			_		-					
Lesson Delivery - main	Face-to-face – Dis						ssessment.			
mode of delivery chosen	e-learning opport				_					
to support student	Seminars: studen									
teachers in achieving the	Independent stud	ly: Individual	l and group	presentation	ns on nature o	t assessment				
learning outcomes.										
Overarching	Demonstrate an	understandir	ng of the r	rinciples an	d concepts of	differentiated as	sessment in			
outcome, what you	upper primary sch				a cocop.to c.					
want the student		•		, ,						
teachers to achieve,										
serves as basis for										
the learning										
outcomes. An										
expanded version of the description.										
Write in full aspects										
of the NTS										
addressed										
 Learning Outcome 	Learning Outcom	es	Learning	Indicators		entify which cros	_			
for the lesson,						sues – core and tr				
picked and						ills, inclusivity, ed				
developed from the						ddressing diversit	•			
course specification						ese be addressed eveloped?	or or			
 Learning indicators for each learning 	CLO 1. Demonstra	ntο	Analy	se the princ		ommunication ski	ills: through			
outcome	knowledge, under			entiated ass		dividual and grou				
	of basic principles			in the chara		esentations	•			
	concepts in differ			sic concepts		gital literacy: the	use of on-			
	assessment such	_	asses	sment, test,		ne resources and	digital			
	assessment, testii			urement, ar	14	evices.				
	measurement and			ation, as we		ersonal developm				
	evaluation and th			oses of asses	_	nrough presentati				
	of assessment (N	13 3K, 3I,		rentiate amo	U	eveloping of argui				
	3p; NTECF p.46).		asses	sment, test,		quity and inclusivi				
					Võ	arious types of gro	oups mixed			

Topic Title:			measurement, and evaluation. Teaching and learning activities	gender/ability etc and gender sensitive interactive strategies and illustrations in assessment.
Principles and nature of	Sub-topic	Stage/time	on the delivery mode selected. I work or independent.	
differentiated			Teacher Activity	Student Activity
assessment	Introduction to the course manual	20 minutes	Face-to-face: Introduce student teachers to the Course Manual and discuss the various components including assessment procedures	Face-to-face: Participate in the discussion of various components of the course manual, take opportunity to ask questions about the Course Manual including assessment procedures. Outline their expectations and views about the mathematics
	Meaning and principles of differentiated assessment Identification and explanation of characteristics and basic concepts	20 minutes	Reviews RPK through questioning how they observed their mentors assess learners during their STS a why assessment should be differentiated. Guide student teachers to use the phones to search for the meaning differentiated assessment or guide them by providing prompts from their supported teaching experiences. Let tutors think-pair and share	son course. Share experiences on how mentors assessed learners during STS. Provide responses on why assessment should be differentiated drawing on their STS experiences and knowledge in psychology.
		20 minutes	Their views on the principles of differentiated assessment. Use concept cartoons to initiate a discussion on meaning and characteristics of concepts such a assessment, test, measurement, evaluation, as well as the purpose of assessment.	prompts provided or respond Pairs share their views on principles of differentiated
	Differences among assessment, test, measurement, and evaluation.	1 hour	Independent learning Student teachers are assignedint four groups (mixed gender/ability group toresearch on assessment, test, measurement, and evaluation and present in class	y)for participate actively in groups and present their

	Age	50 minutes	Seminar:	Seminar:
	appropriate		Use pyramid discussions to	Shares experiences with
	differentiated		generate interactions on	based on STS experiences
	assessment		purposes of age appropriate	·
	and purposes		assessment citing illustrations	
	of assessment		from STS experiences.	
	Closure	10 minutes	Review key concepts through	Participate in review of
			questions and answers and	lesson by responding to
			summarise lesson	questions.
Lesson assessments –	In-lesson Assess	ment: individu	ial and group presentation on princi	ples and nature of
evaluation of learning: of,			ceptual distinctions and purposes of	
for and as learning within	CLO 1			
the lesson	NTS			
	h)Sets meaning	ul tasks that e	ncourages learner collaboration and	leads to
	purposeful learr	ning.	<u> </u>	
	i) Explains conce	epts clearly usi	ng examples familiar to students.	
	j) Produces and	uses a variety	of teaching and learning resources ir	ncluding ICT, to
	enhance learnin	g.		- '
Instructional Resources	1. TESSA	Online Educati	onal Resources (www.tessafrica.net)	. T-TEL Modules (www.t-
	tel.org)		, ,	,
			Resources (www.Tess-india.net,	
	www.o	erafrica.org,w	ww.futureLearn.com, www.telmooc.	.org, www.col.org, Khan
	acaden	ny)	· ·	
	3. The iBo	x (CENDLOS)		
	4. YouTuk	е		
Required Text (core)	Asamoah-Gyima	h, K., &Anane	E. (n.d.). Assessment in basic school	s. Cape Coast. Institute of
	Education.			
	Eshun, P.&Effrin	n, P. K. (2008).	Basics in measurement, evaluation of	and statistics in education.
	Cape Coast: Yac	i Publications		
	Tamakloe, E. K.	Amedahe, F. K	., & Atta, E. T. (2005). Principles and	methods of teaching. Accra:
	Black Mask Ltd			
Additional Reading List	Alonge, M. F. (2	004). Measure	ment and evaluation in education an	nd psychology (2nd ed.).
	Ado-Ekiti: Aded	ogo Pub. Co.		
	Anastasi, A. (198	32). Psychologi	cal testing (6th ed.). New York: Macı	millan Publishing Inc.
	Archer, F. K. (20	02). Measuren	nent and evaluation in education. Ku	masi: Paks.
	Burke, J. & Larry	, C. (2008). <i>Ed</i>	ucational research: Quantitative, qua	alitative, and mixed
	approaches. Ne	w York: Sage P	ublication.	
	,,,	,	and evaluating school learning. Bos	•
	Gronlund, E. (20	03). Assessme	nt of students' achievement. (7th ed.	.). Boston: McGrawHill.
	, ,	•	assessment of students (3rd ed.). No	,
	Onivehu, A. O. 8	kAmoah, S. A.	2002). Essentials of measurement a	nd evaluation. Accra: K. 'N'
	B. Publishers.			
CPD needs	E-Assessment in	Primary School	ols. Principles and nature of different	tiated assessment

Year of B.Ed. 2 Semeste	r 1	Place of lesson in semester	12345678910 11 12
-------------------------	-----	-----------------------------	-------------------

Title of Lesson	Principles, fo and as learni		rposes o	f assessment f	for/of	Lesso	on Duration	3 Hours
Lesson description	The lesson seeks to explore the principles and purpose of different forms of assessment of primary school learners as well as managing transition from Upper Primary through to the junior high school level. The purpose is to assist the students to appreciate all the principles that guides how assessment is conducted and how it is used to support the							
Previous student teacher knowledge, prior learning (assumed) Possible barriers to learning in the lesson	Student teac supported to assessment. Misconception	teaching and learning process especially for students with diverse needs. Student teachers have observed their mentors using different forms of assessment during supported teaching in schools. They have also taken a lesson in basic concepts of assessment. Misconceptions about assessment						
Lesson Delivery – chosen to support student teachers in achieving the outcomes	Face-to- face [V]	Practica I Activity [\(\forall \)]	Work- Based Leaning	Seminar s [V]	Indepen Study	ident	e-learning opportunities	Practicum
Lesson Delivery – main mode of delivery chosen to support student teachers in achieving the learning outcomes.	Seminar: Stu on factors th	dent teache at influence vity: Studer	ers work curricul nts are a	ontopics eithe um developm sked to study	er individu ent in Gha	ially or ana	used in facilita in groups for p ulum and identi	resentations
Overarching outcome, what you want the student teachers to achieve, serves as basis for the learning outcomes. An expanded version of the description. Write in full aspects of the NTS addressed	Demonstrate knowledge and understanding of principles and purposes of assessment. (NTECF; NTS 3k, 3l, 3m, 3p).							essment.
Learning Outcome for the lesson, picked and developed from the course specification Learning indicators for each learning outcome	Learning Out	comes	Lear	ning Indicato	rs		Identify which cutting issues transferable s inclusivity, eq addressing div will these be a developed?	– core and skills, uity and versity. How
	CLO 2. knowledge, understandir assessment learning/of las learnin projects (NT 31, 3m, 3p).	following and good through	of or d h h	Differentiate forms of asse Assessment of (AoL), Assessing (AoL), Assessing (AoL) for Learning (Discuss the provenious forms assessment; Create various activities und forms of asse Use different assessment dichild study.	ssment: If Learning ment as I), Assessm AfL); Interpretation Is a sassessment If the difference of Interpretation If the difference of Interpretation Interp	nent f the ent erent	Communicati through ques answers. Digital literact the internet from the discussed. Personal deversions. Equity and in application of to design assevarious prima with diverse I Critical thinking assessment	tions and cy: Surfing or relevant on themes to elopment: nar clusivity: principles essment for ry pupils earners ng: create

Topic Title: Principles and purposes of assessment	Sub-topic	Stage/time	Teaching and learning activities to achieve outcomes depending on the delivery mode selected. Teacher-led collaborative group work or independent.			
			Teacher Activity	Student Activity		
	General principles of assessment	20 minutes	Face-to-face Explores RPK through questioning. Tutor guides students to review basic concepts in assessment. (PD theme 2)	Face-to-face Provides relevant responses for questions		
		30 minutes	Teace-to-face Teacher-led discussion using think, pair shareon the meaning and three forms of assessment; Teacher lead class to examine the differences among the forms assessment.	Face-to-face Participate in discussions through questions and answers base on their STS experiences.		
	Purposes of assessment; Assessment of Learning (AoL), Assessment as Learning (AaL), Assessment for Learning (AfL);	1 hour	Practical activity and seminar Put student into small groups and guide purposes of the assessment: formsAssessment of Learning (AoL), Assessment as Learning (AaL), Assessment for Learning (AfL);	Practical activity Student teachers Work in their groups to examine purpose of assessment Groups present findings to whole class		
			Let groups present on purposes of assessment. Move round various groups to provide support where necessary (PD theme 4)			
		1 hour	Practical activity and Seminar Guide student teachers to work in their small mixed ability groups to create various activities of the assessment forms under selected topics from the upper primary	Randomly selected groups present to the whole class. Groups compare with what they have and critique. Work in their small mixed ability groups to examine assessment practices		
			Guide them to examine the assessment practices provided in the syllabuses and critique. This should be presented in the next lesson	provided in the upper primary curriculum and present during the next lesson.		
	Closure	10 minutes	Review key aspects and summarise lesson through questions and answers	Respond to questions to review lesson		

Lesson assessments – In-lesson Assessme	ent: Peers Review of group presentation for other members to ask
	tribute to discussion.
	mative Assessment
	amining assessment practices under AaL, AfL and AoL provided in the
	ous topics and corresponding indicators to be addressed should be
	red to count towards grading in the 5 th week. CLO 2
NTS	
	ety of assessment modes into teaching to support learning.
	rs and gives constructive feedback.
	emediates learners' difficulties or misconceptions, referring
	eds lie outside the competency of the teacher.
	ul records of every learner and communicates progress clearly to
parents and learne	
o) Demonstrates a	wareness of national and school learning outcomes of learners.
p) Uses objective c	riterion referencing to assess learners.
Instructional Resources • TESSA Online B	Educational Resources (<u>www.tessafrica.net</u>)
T-TEL Modules	s (www.t-tel.org).
Other Relevan	t Online Resources (www.Tess-india.net,
	a.org,www.futureLearn.com, www.telmooc.org, www.col.org, Khan
academy)	
The iBox (CENI	DLOS)
YouTube	2-33)
	Teacher Education and Learning (2016). Group work: Professional
_	
	guide for tutors. Accra. Ministry of Education (www.t-tel.org).
	Teacher Education and Learning (2016). Questioning: Professional
	guide for tutors. Accra. Ministry of
Education (<u>ww</u>	
	t Online Resources (<u>www.Tess-india.net</u> ,
	a.org,www.futureLearn.com, <u>www.telmooc.org</u> , <u>www.col.org, Khan</u>
academy)	
Primary schoo	l Curriculum and syllabuses
Required Text (core) Asamoah-Gyimah,	K., & Anane, E. (n.d.). Assessment in basic schools. Cape Coast. Institute
of Education.	
Eshun, P., &Effrim,	P. K. (2008). Basics in measurement, evaluation and statistics in
education. Cape Co	past: Yaci Publications
Tamakloe, E. K. Am	nedahe, F. K., & Atta, E. T. (2005). Principles and methods of teaching.
Accra: Black Mask	Ltd
Additional Reading List Alonge, M. F. (2004	4). Measurement and evaluation in education and psychology (2nd ed.).
Ado-Ekiti: Adedogo	Pub. Co.
Anastasi, A. (1982)	. Psychological testing (6th ed.). New York: Macmillan Publishing Inc.
Archer, F. K. (2002)). Measurement and evaluation in education. Kumasi: Paks.
Burke, J. & Larry, C	. (2008). Educational research: Quantitative, qualitative, and mixed
	/ork: Sage Publication.
	. Measuring and evaluating school learning. Boston: Allyn Bacon.
I Gronlund, F. (2003	
). Assessment of students' achievement. (7th ed.). Boston: McGrawHill.
Nitko, A. J. (2001).). Assessment of students' achievement. (7th ed.). Boston: McGrawHill. Educational assessment of students (3rd ed.). New Jersey: Prentice-Hall.
Nitko, A. J. (2001). Onivehu, A. O. &A). Assessment of students' achievement. (7th ed.). Boston: McGrawHill.
Nitko, A. J. (2001). Onivehu, A. O. &Ai 'N' B. Publishers.). Assessment of students' achievement. (7th ed.). Boston: McGrawHill. Educational assessment of students (3rd ed.). New Jersey: Prentice-Hall.

Year of B.Ed. 2 Semeste	r 1	Place of lesson in semester	12 3 4 5 6 7 8 9 10 11 12
-------------------------	-----	-----------------------------	----------------------------------

This of Lance	T	t							
Title of Lesson	Types of assessme	ent			Les	son D	uration	3 Но	urs
Previous student teacher knowledge, prior learning (assumed)	This lesson aims to prepare students todemonstrate knowledge and understanding of the grade level expectations and assessment benchmarks for basic schools in Ghana. It is also structured to enable them identify and apply the various types of assessment to address the needs of diverse learners in order to meet the grade level expectations and national assessment benchmarks. Student teachers have knowledge and understanding of the principles and purpose of assessment. Moreover, they had the opportunity of embarking on STS activities which exposed them to the primary school curriculum and its assessment components.								
Possible barriers to learning in the lesson	Students have no	t prepared test	t items bef	ore.					
Lesson Delivery – chosen to support student teachers in achieving the outcomes	۷]	Practical Activity [V]	Work- Based Leaning	Seminars [\(\mathbf{I} \)]	Indepen Study [e-learning opportun [v]	_	Practicum
Lesson Delivery – main mode of delivery chosen to support student teachers in achieving the learning outcomes.	Face-to-face – Discussion, lecturette, think, pair share should be used in facilitating lessons on types of assessment. e-learning opportunities – use mobile phones and other digital devices to look for information online for presentations on types of assessment. Independent study: student teachers engage with relevant and appropriate curriculum to identify various types of assessment. Practical Activity: Group presentation and discussion on characteristics, merits and demerits of the various types ofassessment.								
Overarching outcome, what you want the student teachers to achieve, serves as basis for the learning outcomes. An expanded version of the description. Write in full aspects of the NTS addressed	demonstrate knowledge and understanding of the types of assessment and assessment benchmarks for basic schools in Ghana(NTS 3g, 3k, 3l, 3p; NTECF).								
Learning Outcome for the lesson, picked and developed from the course specification	Learning Outcom	es	Learning I	ndicators			transfera inclusivit addressir will these	sues - able sk y, equ ng divo e be a	– core and kills,
Learning indicators for each learning outcome	CLO 3. demonstra knowledge and understanding of assessment and ti level expectations assessment bench basic schools in G 3g, 3k, 3l, 3p; NTE	types of he grade s and nmarks for hana(NTS	 Exami diagno based standa Discus 	guish between mative as ne the chara ostic assessment ards-based a s the merits continuous	sessment acteristics nent; scho ; and assessmen and dem	of ool- it erits		group tions eracy: net fo ion or ssed. devel	: Surfing r relevant n themes to opment:

Topic Title:			 Examine the differences between the former objective- based and current standards based primary curriculum. Discuss the grade level expectations and assessment benchmarks for upper primary pupils in Ghana. Discuss the advantaged and challenges in the use of standards based assessment in Ghana and how they can be addressed Teaching and learning activities to ach 	assessment in educational delivery Respect and diversity: Designing Assessment for all primary students with diverse background for Diversity, Equity and inclusivity
Types of assessment	Sub-topic	Stage/time	on the delivery mode selected. Teach work or independent.	er-led collaborative group
			Teacher Activity	Student Activity
	Introduction to types of assessment.	40 minutes	Face-to-face Reviews RPK using questioning to explore student teachers understanding(PD theme 2) Select groups at random to present last week's assignment. Let them use comments to revise work for final submission for	 Provide relevant answersto questions posed. Present last week's assignment and revise for submission in week 5 for scoring
	Formative	40 minutes	scoring in week five e-learning opportunities:	scoring e-learning opportunities:
	assessment and types of formative assessment	To minutes	Guides students to use mobile phones and other digital devices to look for information online on formative assessment and types of formative assessment and share their answers in class. Guide them to provide relevance examples from their experience during STS	Student teachers use mobile phones and other digital devices to look for information online on formative assessment and types of formative assessment and share their answers in class. Share some experience from STS
	Characteristics, merits and demerits of continuous assessment	40 minutes	Face-to-face Leads discussion on meaning and characteristics of continuous assessment. Guide student teachers to search for information using their phones Use pyramid discussion to initiate discussion on merits and demerits. Let two big groups formed from the pyramid appoint representatives to debate	Face-to-face Search for information on meaning of CA using their phones and share Two big groups formed from the pyramid appoint representatives to debate merits and demerits: Whether CA is necessary or unnecessary
	Objective based and standards based curriculum	30 minutes	Practical Activity: Leads discussionsusing concept mapping/cartooning and assist students to work in pairs or small mixed ability groups on similarities and differences between the Objective based and standards based curriculum and present to class random. Soft copies or hard copies of the curricula should be made	Practical Activity: Student teachers work in pairs or small groups on assigned task and share their answers.

			available to students					
			(PD theme 2, 3, 4)					
	Grade level expectations	10 minutes	Guides student teachers to go through the primary curriculum	Go through primary curriculum to identify and				
	for upper primary pupils		identify and share the grade expectations for upper primary	share grade expectations for upper primary				
	and national assessment		pupils and national assessment benchmarks	learners and national assessment benchmarks				
	benchmarks							
	Strengths and challenges of the use of	15 minutes	Put student teachers into pairs or smaller groups to start working on Strengths and challenges of the use	Work in pairs or smaller groups on Strengths and challenges of the use of				
	standards based		of standards based curriculum in Ghana and how they can be	standards based curriculum in Ghana and				
	curriculum in Ghana and		addressed. Let them share preliminary ideas and	how they can be addressed. Share				
	how they can be addressed		present full details in next lesson	preliminary ideas and present full details in next lesson				
	Closure	5 minutes	Review key points through questions and answers	Provide responses for review of key point in the lesson.				
Lesson assessments –	In-lesson Assess	ment:Grouppi	ı resentationon various tasks assigned duı					
evaluation of learning:								
of, for and as learning	NTS							
within the lesson			sment modes into teaching to support le	earning.				
		I) Listens to learners and gives constructive feedback.						
			earners' difficulties or misconceptions, re de the competency of the teacher.	ererring				
			f every learner and communicates progr	ess clearly to				
	parents and lear	_	revery rearrier and communicates progr	ess ciedity to				
	o) Demonstrates	awareness of	national and school learning outcomes rencing to assess learners.	of learners.				
Instructional Resources			Resources (www.tessafrica.net)					
		les (<u>www.t-tel</u>	· · · · · · · · · · · · · · · · · · ·					
			sources (<u>www.Tess-india.net</u> ,					
	www.oerafr	ica.org,www.f	utureLearn.com, www.telmooc.org, ww	w.col.org, Khan academy)				
	The iBox (CE)	•						
	YouTube			- 6				
			cation and Learning (2016). Group work	: Professional development				
			nistry of Education (www.t-tel.org). Ication and Learning (2016). Questioning	v. Professional development				
		tors. Accra. Mi	- · · · · · · · · · · · · · · · · · · ·	. Frojessional development				
		www.t-tel.org)						
			sources (<u>www.Tess-india.net</u> ,					
	www.oerafr	ica.org,www.f	utureLearn.com, www.telmooc.org, ww	w.col.org, Khan academy)				
Required Text (core)	Asamoah-Gyima Education.	h, K., &Anane,	E. (n.d.). Assessment in basic schools. Ca	ape Coast. Institute of				
	Cape Coast: Yaci	Publications	. Basics in measurement, evaluation and					
	Black Mask Ltd		., & Atta, E. T. (2005). Principles and met					
Additional Reading List	Ekiti: Adedogo P	ub. Co.	ment and evaluation in education and ps					
			cal testing (6th ed.). New York: Macmilla					
			nent and evaluation in education. Kumas ucational research: Quantitative, qualita					
	New York: Sage		and the second s	, aa				
	_		and evaluating school learning. Boston:	Allyn Bacon.				

		Gronlund, E. (2003). Assessment of students' achievement. (7th ed.). Boston: McGrawHill. Nitko, A. J. (2001). Educational assessment of students (3rd ed.). New Jersey: Prentice-Hall. Onivehu, A. O. & Amoah, S. A. (2002). Essentials of measurement and evaluation. Accra: K. 'N' B. Publishers.
CPI	D needs	The Pre-tertiary curriculum Curriculumand its assessment components.

Year of B.Ed. 2 Semester 1 Place of lesson in semester 12345678910 11 12

Title of Lesson	Taxonomies of and Krathwo		l objectives	(Revised version	n by Anderson	Lesson Duration	3 Hours		
Lesson description	appropriate learning plar objectives in	This lesson aims to prepare students todemonstrateunderstanding and use of comprehensive and appropriate learning objectives and outcomes in relation to the various domains of learning in learning plans. It is planned to assist student teachers to appreciate criteria in writing learning objectives in their learning plans to enable them provide or develop appropriate assessment practices to address indictors/objectives in the curriculum during STS							
Previous student teacher knowledge, prior learning (assumed)	primary scho	Student teachers had the opportunity of embarking on STS activities which exposed them to primary school curriculum and lesson plans.							
Possible barriers to	Students hav	e not prepare	ed lesson pl	an before					
learning in the lesson		- · · ·	100				l s .:		
Lesson Delivery – chosen to support student teachers in achieving the outcomes	Face-to- face [v]	Practical Activity [\forall]	Work- Based Leaning	Seminars []	Independent Study [1/]	e-learning opportunities	Practicum		
main mode of delivery chosen to support student teachers in achieving the learning outcomes.	concept of learning outcomes and types of objectives. Independent study: student teachers engage with relevant and appropriate curriculum to identify and make presentations on cognitive, affective and psychomotor domains. Practical Activity: Group presentation and discussion on projects to design taxonomies of educational objectives.								
Overarching outcome, what you want the student teachers to achieve, serves as basis for the learning outcomes. An expanded version of the description. Write in full aspects of the	demonstrate NTS 3k, 3l, 3p		ng and use (of comprehensiv	e and appropria	te learning objec	tives (NTECF;		
NTS addressed									
Learning Outcome for the lesson, picked and developed from the course specification Learning	Learning Out	comes		Learning Indicat	ors	developed?	s – core and skills, quity and iversity. How addressed or		
indicators for each learning outcome	CLO 4. demon understandin comprehensi learning obje in relation to of learning in plans(NTECF;	ng and use of ve and appro ctives and ou the various of learning	priate tcomes Iomains	setting learr • Formulate a learning obj	ectives and nder the various learning in	Communication through group presentation Personal dev Learning about domains. Respect and	p s elopment: ut different		

				Learning objectives and outcomes in line with the various domains of learning in learning plans. Develop critical thinking skills when developing assessment practices to address indicators/expectations or objectives in the curriculum
Topic Title: Taxonomies of educational objectives	Sub-topic	Stage/time	Teaching and learning activities to depending on the delivery mode sollaborative group work or indep	selected. Teacher-led
			Teacher Activity	Student Activity
	Introduction	20 minutes	Face-to-face Select groups randomly to present last week's assignment. Reviews RPK using questions and answers on their experiences with STS and their observations about lesson plans they came in contact with. (PD theme 2)	Selected groups present last week's assignment. Provide relevant answers to questions posed and applying the knowledge gained during STS.
	The concept of learning outcomes and types of objectives (behavioural and learning)	40 minutes	Face-to-Face: Leads discussionsusing concept mapping/cartooning and assist students to appreciate the concept of learning outcomes and types of objectives; (PD theme 2, 3, 4). Students are grouped into mixed ability and discusses the types of objectives	Face-to-Face: Student teachers participate in lesson and use their STS experience to answer questions Students participate in groups and share their STS experiences.
	Types of Domains (cognitive, affective and psychomotor)	60 minutes	Independent Study: Individual study and group presentations on cognitive, affective and psychomotor domains(PD theme 2, 3, 4). Students are grouped into mixed ability and discusses the various domains	Independent Study: Student teachers participate in group activities
	Educational Objectives (cognitive domain objectives, affective domain objectives and psychomotor domain objectives)	50 minutes	Practical Activity: Teacher provides and discusses samples of educational objectives/indicators from the Pre-tertiary curriculum. Student are supported in groups of mixed ability to work on projects to write indicators/objectives for selected topics	Practical Activity: Students participate in groups and share what they have written.
	Closure	10 minutes	Review key points and summarise lesson through questions and answers. Give a reading assignment on stages in classroom testing	Respond to questions to review key points

Lesson assessments –	In-lesson Assessment:Grouppresentation of assigned tasks during lessons CLO 4
evaluation of	in-lesson Assessment. Grouppiesentationor assigned tasks during lessons CLO 4
	Common and 1. Combinuous Assessment
learning: of, for and	Component 1: Continuous Assessment
as learning within the	Student work on writing indicators for selected topics and assessment practices (AoL, AaL,AfL) that
lesson	can be used to address the indicators to be submitted in the 5 week for scoring.
Instructional	TESSA Online Educational Resources (<u>www.tessafrica.net</u>)
Resources	T-TEL Modules (<u>www.t-tel.org</u>).
	Other Relevant Online Resources (<u>www.Tess-india.net</u> ,
	www.oerafrica.org,www.futureLearn.com, www.telmooc.org, www.col.org, Khan academy)
	The iBox (CENDLOS)
	YouTube
	Transforming Teacher Education and Learning (2016). Group work: Professional development
	guide for tutors. Accra. Ministry of Education (www.t-tel.org).
	Transforming Teacher Education and Learning (2016). Questioning: Professional development
	guide for tutors. Accra. Ministry of
	Education (<u>www.t-tel.org</u>).
	Other Relevant Online Resources (www.Tess-india.net,
	www.oerafrica.org,www.futureLearn.com, www.telmooc.org, www.col.org, Khan academy)
Required Text (core)	Asamoah-Gyimah, K., &Anane, E. (n.d.). Assessment in basic schools. Cape Coast. Institute of
. ,	Education.
	Eshun, P., &Effrim, P. K. (2008). Basics in measurement, evaluation and statistics in education. Cape
	Coast: Yaci Publications
	Tamakloe, E. K. Amedahe, F. K., & Atta, E. T. (2005). <i>Principles and methods of teaching</i> . Accra:
	Black Mask Ltd
Additional Reading	Alonge, M. F. (2004). Measurement and evaluation in education and psychology (2nd ed.). Ado-
List	Ekiti: Adedogo Pub. Co.
	Anastasi, A. (1982). <i>Psychological testing</i> (6th ed.). New York: Macmillan Publishing Inc.
	Archer, F. K. (2002). Measurement and evaluation in education. Kumasi: Paks.
	Burke, J. & Larry, C. (2008). Educational research: Quantitative, qualitative, and mixed approaches.
	New York: Sage Publication.
	Carey, L. M. (2001). Measuring and evaluating school learning. Boston: Allyn Bacon.
	Gronlund, E. (2003). Assessment of students' achievement. (7th ed.). Boston: McGrawHill.
	Nitko, A. J. (2001). Educational assessment of students (3rd ed.). New Jersey: Prentice-Hall.
	Onivehu, A. O. &Amoah, S. A. (2002). Essentials of measurement and evaluation. Accra: K. 'N' B.
	Publishers.
CPD needs	The Upper Primmary Curriculum
C. D liceus	The opper training curriculum

Year of B.Ed. 2 Semester 1 Place of lesson in semester 12345678910 11 12

Title of Lesson	Stages in c	lassroom t	esting I							
					Lesso	n Duration		3 H	ours	
Lesson description	This lesson aims to prepare students todemonstrateunderstanding and use of the various principles used in writing test items. The course also plans to assist students to develop capacity to design a table of specification in item construction and test scoring guide for constructed test items for a selected topic. This will equip them with skills to enable them write good test items that word address indicators									
Previous student teacher							stivitios vybia	sh ov	nasad tham	
		Student teachers had the opportunity of embarking on STS activities which exposed them								
knowledge, prior learning (assumed)	to primary	to primary school curriculum and exercises set by teachers.								
Possible barriers to learning	Students n	Students may have phobia for tests and exams from their previous experiences.								
in the lesson		.,								
Lesson Delivery – chosen to	Face- I	Practical	Work-	Seminar	s Ind	lependent	e-learning		Practicum	
support student teachers in achieving the outcomes		Activity [V]	Based Leaning	[]	Stu	ıdy[√]	opportunit	ies		
support student teachers in achieving the learning outcomes. • Overarching outcome, what you want the student teachers to achieve, serves as basis for the learning outcomes. An expanded version of the description. • Write in full aspects of	identify and make presentations on cognitive, affective and psychomotor domains. Practical Activity: Group presentation and discussion on projects to design taxonomies educational objectives. Demonstrate understanding and use of the various principles used in constructing test items and how to score/grade test. (NTECF; NTS 3f, 3l).							ains. onomies of		
Learning Outcome for the lesson, picked and developed from the course specification Learning indicators for	Learning Outcomes		Learning	Indicators		– core inclusi	fy which cross and transfe ivity, equity a ity. How will ssed or deve	rable and a thes	skills, iddressing e be	
each learning outcome	cLO 5. demonstra understand developme designing a specificatio constructio items for a selected to a scoring g (NTECF; N	ding and ent for a table of on, ng test oppic, and guide	deve form • Deve form uppe durin	elop various ats for asse er primary long g STS tructand so	ous item item essing earners	Comm person about Respe object with t learnin Critica	nunication sk presentation nal developn different do ct and divers tives and out he various do ng in learning al thinking de em writing.	cills: tons nent: main sity: l come omai	hrough Learning is. Learning es in line ins of ins.	

Topic Title: Item Format	Sub-topic	Stage/time	Teaching and learning activities to achieve outcomes depending on the delivery mode selected. Teacher-led collaborative group work or independent.			
			Teacher Activity	Student Activity		
	Introduction	20 minutes	Face-to-face Reviews RPK using questions and answers on their experiences with STS and their observations about lesson plans they came in contact with. (PD theme 2)	Provide relevant answers to questions posed and applying the knowledge gained during STS.		
	Constructing	60 minutes	Face-to-face& group	Face-to-face & group		
	the test		activity Use Lecturette to introduce basic stages in test construction: Constructing the test Administering the test Scoring the test Analyzing the test item Take student teachers through the first stage: principles of test construction Put student teachers into small groups, assign a principle to each group and guide them to work on what goes into each. Let them present their findings whiles you expand areas that need clarification such as developing table of specification underdetermining what is to be tested.	activity Listen carefully noting the stages and ask questions where necessary. Work in small groups, on a principle. Present findings to whole class. Note additions and expansions made by tutor		
	Type of tests: Types of Objective-type tests	60 minutes	Face-to-Face & practical activity Leads discussion on types of objective-type tests and guidelines for constructing each (PD theme 2, 3, 4). Types are: Selection type (Multiple choice, true or false, matching) Supply type (sentence completion, fill in the blank, short answers)	Face-to-Face & practical activity Participate in activities by listening to directives from tutor.		
		15 minutes	Practical activity Let student teachers work in pairs to develop 2 items under each of the types using the guide lines. Topics should be	Practical activity Work in pairs to develop 2 items under each of the types using the guide lines. Exchange for peer assessment and comments		

		ı	T	I		
			selected from the			
			subjects in the pre-			
			tertiary upper primary			
			curriculum			
			Let them exchange for			
			peer assessment and			
			comments			
		15 minutes	Face-to-face	Face-to-face		
			Lead discussion on	Take part in		
			strength and weaknesses	discussingstrength and		
			of objective type tests	weaknesses of objective type		
				tests		
	Conclusion	10 minutes	Give project to be	Work on project in pairs to		
			presented the following	be presented the following		
			week. Let students work	week. Let students work in		
			in pairs to create 5 items	pairs to create 5 items under		
			under each type. Topics	each type		
			should be selected from	Respond to questions to		
			subjects in the pre-	review lesson		
			tertiary upper primary curriculum.			
			Review key concepts and			
Laccan accessments	In lesson Assess	l Cronne	summarise lesson	the source of the lesson CLOT		
Lesson assessments – evaluation of learning: of,			f portfolio to be scored	the course of the lesson. CLO 5		
for and as learning within			pjective test items (with all ty	nes) and 3 essay types items		
the lesson	with their scorin			pesy and 5 essay types items		
the lesson	With their scorin	is suides (iliai)	ting serietiles).			
	NTS 3					
		ariety of asses	sment modes into teaching to	o support learning.		
	_		constructive feedback.	o o p p o constant.		
			earners' difficulties or miscon	ceptions, referring		
			de the competency of the tea	-		
			f every learner and communi			
	parents and lear		,	, , , ,		
	o) Demonstrates	s awareness of	national and school learning	outcomes of learners.		
			erencing to assess learners.			
Instructional Resources			Resources (www.tessafrica.n	et)		
	T-TEL Modu	iles (<u>www.t-tel</u>	.org).			
			ources (www.Tess-india.net,			
	www.oerafr	rica.org,www.f	utureLearn.com, www.telmo	oc.org, www.col.org, Khan		
	academy)					
	The iBox (Ci	ENDLOS)				
	 YouTube 					
	Transformir	ng Teacher Edu	ication and Learning (2016).	Group work: Professional		
	developmen	nt guide for tut	ors. Accra. Ministry of Educat	tion (www.t-tel.org).		
	Transformir	ng Teacher Edu	ication and Learning (2016). (Questioning: Professional		
	developmen	nt guide for tut	ors. Accra. Ministry of			
	Education (y	www.t-tel.org)				
	Other Relev	ant Online Res	sources (<u>www.Tess-india.net</u> ,			
	www.oerafr	rica.org,www.f	utureLearn.com, www.telmo	oc.org, www.col.org, Khan		
	academy)					
	•					
Required Text (core)	Asamoah-Gyima	ıh, K., &Anane,	, E. (n.d.). Assessment in basic	schools. Cape Coast. Institute		
	of Education.					
			. Basics in measurement, eva	luation and statistics in		
	education. Cape					
			., & Atta, E. T. (2005). <i>Principl</i>	es and methods of teaching.		
	Accra: Black Mas					
Additional Reading List			ment and evaluation in educe	ation and psychology (2nd ed.).		
	Ado-Ekiti: Adedogo Pub. Co.					

	Anastasi, A. (1982). Psychological testing (6th ed.). New York: Macmillan Publishing Inc.
	Archer, F. K. (2002). Measurement and evaluation in education. Kumasi: Paks.
	Burke, J. & Larry, C. (2008). Educational research: Quantitative, qualitative, and mixed
	approaches. New York: Sage Publication.
	Carey, L. M. (2001). <i>Measuring and evaluating school learning</i> . Boston: Allyn Bacon.
	Gronlund, E. (2003). Assessment of students' achievement. (7th ed.). Boston: McGrawHill.
	Nitko, A. J. (2001). Educational assessment of students (3rd ed.). New Jersey: Prentice-Hall.
	Onivehu, A. O. & Amoah, S. A. (2002). Essentials of measurement and evaluation. Accra: K.
	'N' B. Publishers.
CPD needs	Item construction

Year of B.Ed. 2 Semeste	1	Place of lesson in semester	12345 6 789101112
-------------------------	---	-----------------------------	--------------------------

Title of Lesson	Stages in	classroom tes	ting 2							
	Le						ation	3 Hours		
Lesson description	This lesson aims to prepare students todemonstrateunderstanding and use of the various principles used in writing test items. The course also plans to assist students to develop capacity to design a table of specification in item construction and test scoring guide for constructed test items for a selected topic. This will equip them with skills to enable them write good test items that word address indicators									
Previous student		Student teachers had the opportunity of embarking on STS activities which exposed them to								
teacher knowledge, prior learning (assumed)	primary so	orimary school curriculum and exercises set by teachers.								
Possible barriers to learning in the lesson	Students	may have pho	bia for tests	and exams fro	m their pre	vious experi	ences.			
Lesson Delivery – chosen to support student teachers in achieving the outcomes	Face-to- face [\(\frac{1}{2} \)	Practical Activity [V]	Work- Based Leaning	Seminars []	Independe Study [1/]		rning rtunities	Practicum		
mode of delivery chosen to support student teachers in achieving the learning outcomes.	concept of learning outcomes and types of objectives. Independent study: student teachers engage with relevant and appropriate curriculum to identify and make presentations on cognitive, affective and psychomotor domains. Practical Activity: Group presentation and discussion on projects to design taxonomies of educational objectives. demonstrate understanding and use of the various principles used in constructing test items and									
 Overarching outcome, what you want the student teachers to achieve, serves as basis for the learning outcomes. An expanded version of the description. Write in full aspects of the NTS addressed 		ore/grade tes	_		s principies	useu III cons	er ucting te	est items and		
 Learning Outcome for the lesson, picked and developed from the course specification Learning indicators 		Outcomes		Learning Indic		issues transi equit divers addre	s – core an ferable skil y and addr sity. How w essed or de	lls, inclusivity, essing vill these be eveloped?		
for each learning outcome	understar for design specificati items for	monstrate nding and dev ing a table of ion, construct a selected top iide (NTECF; N	elopment ing test bic, and a NTS 3f,	developin formats Develop v formats fo upper prir during STS Construct	idelines for g various item arious item or assessing mary learner administer ag test items	em throu Perso Learn doma Respe Learn outco variou in lea Critica	nal develo ing about ins. ect and div ing objecti imes in line us domains rning plans	presentations pment: different ersity: ves and e with the s of learning s. developed		

Sub-topic	Stage/time	Teaching and learning activities to achieve outcomes depending on the delivery mode selected. Teacher-led collaborative group work or independent.			
		Teacher Activity	Student Activity		
Introduction	30 minutes	Face-to-face Reviews RPK using questions and answers on their experiences with STS and their observations about lesson plans they came in contact with. (PD theme 2)	Provide relevant answers to questions posed and applying the knowledge gained during STS. Exchange assignments for peer assessment and discuss comments.		
		previous week's assignment. Let them exchange for with other groups for peer assessment and comments.			
Type of tests: Essay-type tests	40 minutes	Face-to-Face & practical activity Leads discussion on essay-type tests and guidelines for constructing them(PD theme 2, 3, 4).	Face-to-Face & practical activity Participate in activities by listening to directives from tutor.		
	30 minutes	Practical activity Let student teachers work in pairs to develop 4 items under each of the types using the guide lines. Select topic from subjects in the upper primary Let them exchange for peer assessment and comments	Practical activity Work in pairs to develop 4 items under each of the types using the guide lines. Exchange for peer assessment and comments		
	20 minutes	Face-to-face Lead discussion on strength and weaknesses of essay type tests	Face-to-face Take part in discussingstrength and weaknesses of essay type tests		
Administering and scoring the test	40 minutes	Face-to-face and practical activity Explore student teachers STS experiences on how assessment is administered in their schools of practice. Use any appropriate talk for learning approach to discuss how assessment should be administered (PD theme 3) Through questioning examine student teachers' knowledge on how tests administered are scored. Guide them to identify and examine the strength and weaknesses each of the two types of scoring rubrics using pyramid discussion: Analytic scoring rubrics Holistic scoring rubrics	Face-to-face and practical activity Take part in discussions on how assessment should be administered drawing experiences from STS (PD theme 3) Identify and examine the strength and weaknesses each of the two types of scoring rubrics using pyramid discussion: Analytic scoring rubrics Holistic scoring rubrics Representatives of the two large groups formed from the pyramid should present work done for comments		
	Type of tests: Essay-type tests Administering and scoring	Introduction 30 minutes Type of tests: Essay-type tests 30 minutes 20 minutes Administering and scoring 40 minutes	Introduction 30 minutes Face-to-face Reviews RPK using questions and answers on their experiences with STS and their observations about lesson plans they came in contact with. (PD theme 2) Guide them to present previous week's assignment. Let them exchange for with other groups for peer assessment and comments. Face-to-face & practical activity Leads discussion on essay-type tests and guidelines for constructing them(PD theme 2, 3, 4).		

			I	1		
			large groups formed from			
			the pyramid should present			
			work done			
	Conclusion	20 minutes	Give project to be presented	Work on project in pairs to be		
			the following week. Let	presented the following week. Let		
			students work in pairs to	students work in pairs to create 5		
			create 5 items under each	items under each type		
			type	Respond to questions to review		
			Review key concepts and	lesson		
			summarise lesson			
Lesson assessments –			presentation tasks assigned in th			
evaluation of learning:				assessed will be part of portfolio		
of, for and as learning	to be assess. To	pic treated wi	ll be part of quiz in week 9.			
within the lesson	NTS 3					
	k) Integrates a	variety of asses	ssment modes into teaching to s	upport learning.		
	I) Listens to lea	rners and gives	constructive feedback.			
	m) Identifies ar	nd remediates l	earners' difficulties or misconce	ptions, referring		
			ide the competency of the teach			
	n) Keeps meani	ingful records o	of every learner and communica	tes progress clearly to		
	parents and lea	irners.				
	o) Demonstrate	es awareness o	f national and school learning or	utcomes of learners.		
	p) Uses objectiv	ve criterion ref	erencing to assess learners.			
Instructional Resources	TESSA Online Educational Resources (<u>www.tessafrica.net</u>)					
	T-TEL Mod	ules (<u>www.t-te</u>	l.org).			
	Other Relevant Online Resources (<u>www.Tess-india.net</u> ,					
	www.oera	frica.org,www.	futureLearn.com, www.telmood	.org, www.col.org, Khan academy)		
	The iBox (C	CENDLOS)				
	YouTube					
	Transforming Teacher Education and Learning (2016). Group work: Professional development					
		guide for tutors. Accra. Ministry of Education (www.t-tel.org).				
				estioning: Professional development		
		utors. Accra. M		,		
		(www.t-tel.org				
			sources (www.Tess-india.net,			
				.org, www.col.org, Khan academy)		
Required Text (core)	Asamoah-Gyimah, K., & Anane, E. (n.d.). Assessment in basic schools. Cape Coast. Institute of					
	Education.	,,	,, == (,			
		im, P. K. (2008). Basics in measurement, evalu	ation and statistics in education.		
	Cape Coast: Yao		,			
	Tamakloe, E. K.	Amedahe, F. k	C., & Atta, E. T. (2005). <i>Principles</i>	and methods of teaching. Accra:		
	Black Mask Ltd			, ,		
Additional Reading List	Alonge, M. F. (2	2004). Measure	ement and evaluation in education	on and psychology (2nd ed.). Ado-		
	Ekiti: Adedogo	•		, , , , ,		
	Anastasi, A. (19	82). Psycholog	ical testing (6th ed.). New York:	Macmillan Publishing Inc.		
			ment and evaluation in educatio	_		
	Burke, J. & Larr	y, C. (2008). <i>Ed</i>	lucational research: Quantitative	e, qualitative, and mixed		
	approaches. Ne					
		_	g and evaluating school learning	. Boston: Allyn Bacon.		
			ent of students' achievement. (71			
			al assessment of students (3rd ed			
	Onivehu, A. O.	&Amoah, S. A	. (2002). Essentials of measuren	nent and evaluation. Accra: K. 'N' B.		
	Publishers.					
CPD needs	Item constructi	on				

Year of B.Ed.	2 Semester	1	Place of lesson in semester	123456789101112
---------------	------------	---	-----------------------------	-----------------

Title of Lesson	Planning classr	oom tests and	assessm	ent: Characte	eristics		- D	2.11
							n Duration	3 Hours
Lesson description	The lesson is designed to expose student teachers to the basic characteristics of tests. This entails the determination of the reliability of validity of tests conducted to enable it generated the kind of evidences required to for meaningful decision making in diverse learning environments. This will thus equip student teachers with the skills required to construct objective and essay type test that measures what they are supposed to measure in upper primary learning environments.							
Previous student		_		and can writ	e test ite	ms. Th	ney have also o	bserved the
teacher knowledge,	administration							200.700 0.10
prior learning		Ü						
(assumed)								
Possible barriers to	Student may n	ot understand	the how	to determine	the relia	bility a	and validity of te	st items.
learning in the lesson								
Lesson Delivery –	Face-to-	Practical	Work-	Seminars	Indeper	ndent	e-learning	Practicum
chosen to support	face [V]	Activity	Based	[]	Study [۷]	opportunities	
student teachers in		[√]	Leaning				[]	
achieving the outcomes								
Lesson Delivery – main					re should	be use	ed in facilitating	lessons on
mode of delivery	various inclusiv	_						
chosen to support							oropriate curricu	lium and
student teachers in	discusses the p							
achieving the learning outcomes.	and assessmer		sentation	on procedur	es for pia	inning	inclusive classro	om tests
outcomes.	and assessiner	11.5.						
Overarching	Demonstrate t	he understand	ling of the	nlanning nr	ocess in a	ssessn	nent taking into	
outcome, what you			_				_	sment
want the student	consideration the diverse group of learners and the reliability and validity of assessment procedures (NTECF; NTS 3f, 3g, k, l, n, m, o, p).							
teachers to	processines (itteer) itte on, og, ny ny ny ny ny ny ny ny							
achieve, serves as								
basis for the								
learning outcomes.								
An expanded								
version of the								
description.								
• Write in full								
aspects of the NTS								
addressed								
 Learning Outcome 	Learning Outco	omes	Lea	rning Indicat	ors		Identify whi	
for the lesson,							cutting issue	
picked and							and transfer	
developed from							inclusivity, e	variity and
the course							addressing	
_								diversity.
specification							How will the	diversity. ese be
• Learning indicators							addressed o	diversity. ese be or
• Learning indicators for each learning		strata the		Familia 11			addressed of developed?	diversity. ese be or
• Learning indicators	CLO 6. Demons		•	Explain the			addressed of developed?	diversity. ese be or tion skills:
• Learning indicators for each learning	understanding	of the plannin	g	reliability an	d validity	,	addressed of developed? Communicathrough gro	diversity. ese be or tion skills:
• Learning indicators for each learning	understanding process in asse	of the plannir	g •	reliability an Examine the	d validity factors t	hat	addressed of developed? Communicathrough gropresentation	diversity. ese be tion skills: up ns
• Learning indicators for each learning	understanding process in asse into considerat	of the plannir essment taking tion the divers	g •	reliability an Examine the improve and	d validity factors t influenc	hat e	addressed of developed? Communicathrough groupresentation Personal de	diversity. ese be tion skills: up ns velopment:
• Learning indicators for each learning	understanding process in asse into considerat group of learne	of the plannir essment taking tion the divers ers and the	g •	reliability an Examine the improve and reliability an	d validity factors t influenc	hat e	addressed of developed? Communicathrough group presentation Personal de individual au	diversity. ese be tion skills: up ns velopment: nd group
• Learning indicators for each learning	understanding process in asse into consideral group of learne reliability and	of the planning essment taking tion the divers ers and the validity of	e •	reliability an Examine the improve and reliability an tests	d validity factors t d influence d validity	hat e of	addressed of developed? Communicathrough group presentation Personal de individual au presentation	diversity. ese be tion skills: up ns velopment: nd group ns
• Learning indicators for each learning	understanding process in asse into considerat group of learne	of the planning ssment taking tion the diversers and the validity of occedures	e •	reliability an Examine the improve and reliability an	d validity factors t d influenced d validity methods	hat e of for	addressed of developed? Communicathrough group resentation Personal de individual au presentation Respect and	tion skills: up ns velopment: nd group ns I diversity:

Topic Title: Planning classroom tests and assessment:	Sub-topic	Stage/time	in upper primary learning environment Examine the factors that improve and influence validity of tests Analyse the categories of validity evidences and apply them decision making during STS Teaching and learning activities to achi on the delivery mode selected. Teacher work or independent.	
characteristics of tests			Teacher Activity	Student Activity
	Introduction	30 minutes	Review student teachers RPK through questions. Guide them to exchange last week's assignment amongst themselves and mark. Link comments to the days lesson	Exchange last week's assignment amongst yourself and mark.
		20 minutes	Face-to-face and e-learning Uses lecturette to introduce topic. Guides student teachers to use their phones in searching for the meaning of reliability and validity. Let them share their findings	Face-to-face and e- learning Participate in discussion and use phones in searching for the meaning of reliability and validity. Share your findings
		30 minutes	Practical activity & independent learning Guides student teachers to think-pair and share their views on factors that improve and influence reliability of tests. Draw on their experiences from STS. Select pairs at random for them to share their findings and make inputs to enrich discuss.	Practical activity & independent learning think-pair and share views on factors that improve and influence reliability of tests. Draw on your experiences from STS. Selected pairs share their findings
		40 minutes	Face-to-face and independent learning Use lecturette to introduce and explain the basic methods for estimating reliability of tests in upper primary learning environment: Test-retest method Equivalent forms method Split half method Use case studies and practical illustrations to stimulate discussions on how methods are applied	Face-to-face and independent learning Examines cases provided to explain illustrate and stimulate discussions on how methods are applied in upper primary classrooms
		30 minutes	Practical activity Guides student teachers to think- pair and share their views on factors that improve and influence validity of tests. Draw on their experiences from STS. Select pairs at random for them to share their findings and make inputs to enrich discuss.	Practical activity think-pair and share views on factors that improve and influence validity of tests. Draw on experiences from STS. Selected pairs share their findings

		25 minutes 5 minutes	Face-to-face and independent learning Use lecturette to introduce and explain the categories of validity evidences and how to apply them in decision. They are: Content-related validity evidence Criterion-related validity evidence Construct-related validity evidence Use case studies and practical illustrations to stimulate discussions on how methods are applied. Review key issues in the lesson and summarise	Face-to-face and independent learning Participate in discussing The various validity evidences using case studies and practical illustrations Provide response to questions posed during review and summary of		
Lesson assessments –	In-lesson Ass	essment: in le	sson tasks on item analysis. CLO 6	lessons.		
evaluation of learning: of, for and as learning within the lesson	Topic treated		ed as part of a quiz in week 9.			
	NTS 3 k) Integrates a	a variety of ass	sessment modes into teaching to suppor	t learning.		
	l) Listens to le	arners and giv	ves constructive feedback.	-		
	l .		es learners' difficulties or misconceptions atside the competency of the teacher.	, referring		
	learners whose needs lie outside the competency of the teacher. n) Keeps meaningful records of every learner and communicates progress clearly to					
	parents and learners.					
	o) Demonstrates awareness of national and school learning outcomes of learners. p) Uses objective criterion referencing to assess learners.					
Instructional Resources	TESSA Or	line Education	nal Resources (<u>www.tessafrica.net</u>)			
	 T-TEL Modules (<u>www.t-tel.org</u>). Other Relevant Online Resources (<u>www.Tess-india.net</u>, www.oerafrica.org, www.futureLearn.com, <u>www.telmooc.org</u>, www.col.org, Khan 					
	academy)					
	The iBox (CENDLOS) YouTube					
	Transforming Teacher Education and Learning (2016). Group work: Professional					
	development guide for tutors. Accra. Ministry of Education (www.t-tel.org).					
	Transforming Teacher Education and Learning (2016). Questioning: Professional development quide for tutors. Accra. Ministry of					
	development guide for tutors. Accra. Ministry of • Education (www.t-tel.org).					
	Other Relevant Online Resources (<u>www.Tess-india.net</u> ,					
	www.oer academy		w.futureLearn.com, www.telmooc.org, v	vww.col.org, Khan		
Required Text (core)	· ·	•	ne, E. (n.d.). Assessment in basic schools	. Cape Coast. Institute of		
	Education.	ffrim D V (20)	08). Basics in measurement, evaluation a	and statistics in advication		
		aci Publication		ina statistics in education.		
	Tamakloe, E. K. Amedahe, F. K., & Atta, E. T. (2005). <i>Principles and methods of teaching</i> . Accra:					
Additional Reading List	Black Mask Lt		urement and evaluation in education and	I nsychology (2nd ed)		
Additional Reduing List	Ado-Ekiti: Ade	edogo Pub. Co				
			ogical testing (6th ed.). New York: Macm			
			rement and evaluation in education. Kun Educational research: Quantitative, qual			
	approaches. N	New York: Sage	e Publication.			
			ing and evaluating school learning. Bostoment of students' achievement. (7th ed.)			
			nal assessment of students (3rd ed.). Nev			
	Onivehu, A. C B. Publishers.). &Amoah, S.	A. (2002). Essentials of measurement ar	nd evaluation. Accra: K. 'N'		

CPD needs	Determining reliability and validity of test items

Year of B.Ed. 2 Semester 1 Place of lesson in semester 12345678910 11 12

Title of Lesson	Planning classroom tests and assessment: Analysing Test Results					Lesso		3 H	ours
Lesson description	The lesson is designed to expose student teachers to test results can be analysed for decision making. This will thus equip student teachers with the skills items in tests and how they functioned. It will also aid in determining the difficulty of a test based on scores awarded to enable student teachers write and administer age appropriate assessment for learners in upper primary.								
Previous student teacher knowledge, prior learning (assumed)	administi	Student teachers know, understand and can write test items. They have also observed the administration and scoring of test items in their schools of practice. Student may not have the skills in analysing test items.							
Possible barriers to learning in the lesson	Student	may not nav	e the skills	iii allalysilig i	est items.				
Lesson Delivery – chosen to support student teachers in achieving the outcomes	Face- to-face [\forall]	Practical Activity [\(\frac{1}{2} \)]	Work- Based Leaning	Seminars []	Independ t Study [e-learning opportunit []	ies	Practicum
Lesson Delivery – main mode of delivery chosen to support student teachers in achieving the learning outcomes. • Overarching outcome, what you want the student teachers to achieve, serves as basis for the learning outcomes. An expanded version of the description. • Write in full aspects of	Face-to-face: Discussion, lecturette, think, pair share should be used in facilitating lessons on various inclusive settings in the classroom. Independent study:student teachers engage with relevant and appropriate curriculum and discusses the procedures for planning inclusive classroom tests and assessments. Practical Activity: Group presentation on procedures for planning inclusive classroom tests and assessments. Demonstrate the understanding of the planning process in assessment taking into consideration the diverse group of learners and the reliability and validity of assessment procedures (NTECF; NTS 3f, 3g, k, l, n, m, o, p).								
Learning Outcome for the lesson, picked and developed from the course specification Learning indicators for each learning outcome	Learning	Outcomes	Lear	ning Indicato	rs		issues – co transferab inclusivity, addressing	re an le ski equi dive be ad	lls, ty and
	understa planning assessme considera diverse g learners a test score decision		e g e ded CF;	Explain the co analysis Discuss the bo analysing iten scores Analyse both essay test iten	enefits of ns in test objective		Communic through gr presentati Personal d individual presentati Respect ar construct learners w characteris Critical third developing learner wit characteris	cation oup ons evelo ons ond divest to divest to divest to divest to divest to differ the differ to differ to differ the differ to differ the differ to differ to differ the di	opment: croup ersity: o assess fferent : items for

Topic Title: Planning classroom tests and	Sub-topic	Stage/time	Teaching and learning activities to achieve outcomes depending on the delivery mode selected. Teacher-led		
assessment: Analysing test	our topic	otage, time	collaborative group work or indep		
results			Teacher Activity	Student Activity	
	Introducti	20 minutes	Review student teachers RPK through questions. Link	Exchange last week's assignment amongst	
			responses to topic to be treated	yourself and mark.	
		20 minutes	Face-to-face and e-learning	Face-to-face and e-	
			Uses lecturette to introduce	learning	
			topic. Guides student teachers	Participate in discussion and use phones in	
			to use their phones in searching for the meaning of test	searching for the meaning	
			analysis/item alaysis. Lets them	and Share your findings	
			share their findings	,	
		20 minutes	Practical activity & independent	Practical activity &	
			learning	independent learning	
			Guides student teachers to think-pair and share their views	think-pair and share views on benefits. Selected pairs	
			on benefits of test	share their findings	
			analysis.Select pairs at random		
			for them to share their findings		
			and make inputs to enrich		
		25 minutes	discuss.	Face-to-face and	
		25 minutes	Face-to-face and independent learning	independent learning	
			rearring .	macpendent learning	
			Use lecturette to introduce and	Examines cases provided	
			explain the basic steps in doing	to explain illustrate and	
			test analysis.	stimulate discussions on	
			Use case studies and practical illustrations to stimulate	how test analysis can be done	
			discussions on how methods are	done	
			applied		
		25 minutes	Practical activity	Practical activity	
			Guides student teachers to	think-pair and share	
			think-pair and share their views on factors that	views on factors that improve and influence	
			improve and influence	validity of tests. Draw	
			validity of tests. Draw on	on experiences from	
			their experiences from STS.	STS. Selected pairs	
			Select pairs at random for	share their findings	
			them to share their findings and make inputs to enrich		
			discuss.		
		40 minutes	Face-to-face and	Face-to-face and	
			independent learning	independent	
			Use lecturette to introduce and	learning	
			explain how to determine discrimination index using:	Participate in discussing The discrimination index is	
			DI = RU _ RL	computed using practical	
			NU NL	illustrations	
			Where:		
			RU= number of pupils in the		
			upper group who answered the test correctly.		
			RL= number of pupils in the		
			lower group who answered the		
			test correctly.		
			NU= number of pupils in the		
			upper group		

İ			All considers of a south to the	
			NL= number of pupils in the	
			lower group	
			Use case studies and practical	
			illustrations to stimulate	
			discussions on how formulae is	
			applied.	
		30 miutes	Face-to-face and	Participate in discussion
			independent learning	and use formula provided
			Use lecturette to introduce and	to solve cases.Use ranges
			explain how to determine item	provided for
			difficulty using:	interpretation.
			$p = \underline{R}$ or $p = \underline{R} \times 100$	
			т т	
			Where:	
			R= number of people who	
			answered the items correctly	
			T= Total number of people who	
			attempted the test item	
			Use case studies and practical	
			illustrations to stimulate	
			discussions on how formulae is	
			applied.	
			Interpretation can be done using	
			the following ranges:	
			Proportion	
			.0049 - very difficult	
			.50 69 - fairly difficult	
			.70 89 - moderately easy	
			.90 – 1.00 - very easy	
			Review key issues and	Ask and answer questions
			summarise lesson	to review key issues
Laccon accoccmonts	In loccon Acc		lacean g raun precentation on reliahi	
Lesson assessments –			lesson group presentation on reliabi	
evaluation of learning: of,	Reflective no	tes on planni	ng classroom tests and assessment	
evaluation of learning: of, for and as learning within	Reflective no	tes on planni		
evaluation of learning: of,	Reflective no portfolio and	otes on planni d graded as pa	ing classroom tests and assessment sart of assessment component 2	
evaluation of learning: of, for and as learning within	Reflective no portfolio and	otes on planni d graded as pa	ng classroom tests and assessment	
evaluation of learning: of, for and as learning within	Reflective no portfolio and Topic treated	otes on planni d graded as pa	ing classroom tests and assessment sart of assessment component 2	
evaluation of learning: of, for and as learning within	Reflective no portfolio and Topic treated	otes on planni d graded as pa d will be asses	ing classroom tests and assessment sart of assessment component 2 assed as part of a quiz in week 9.	should be part of the general
evaluation of learning: of, for and as learning within	Reflective no portfolio and Topic treated NTS 3 k) Integrates	otes on plannid graded as paid will be assessed a variety of a	ing classroom tests and assessment sart of assessment component 2 assed as part of a quiz in week 9. Assessment modes into teaching to s	should be part of the general
evaluation of learning: of, for and as learning within	Reflective no portfolio and Topic treated NTS 3 k) Integrates I) Listens to le	otes on plannid graded as particular designs of the second	ing classroom tests and assessment sart of assessment component 2 assed as part of a quiz in week 9. Assessment modes into teaching to sayives constructive feedback.	should be part of the general upport learning.
evaluation of learning: of, for and as learning within	Reflective no portfolio and Topic treated NTS 3 k) Integrates I) Listens to k m) Identifies	otes on plannid graded as particular designs of a wariety of a earners and gand remedia	ing classroom tests and assessment sart of assessment component 2 assed as part of a quiz in week 9. assessment modes into teaching to sayives constructive feedback. tes learners' difficulties or misconce	should be part of the general upport learning.
evaluation of learning: of, for and as learning within	Reflective no portfolio and Topic treated NTS 3 k) Integrates I) Listens to ld m) Identifies learners who	otes on plannid graded as particular designs of a variety of a earners and grand remediance needs lie of the state of the	ing classroom tests and assessment sart of assessment component 2 assed as part of a quiz in week 9. Assessment modes into teaching to sayives constructive feedback. Ites learners' difficulties or misconce putside the competency of the teach	upport learning. ptions, referring
evaluation of learning: of, for and as learning within	Reflective no portfolio and Topic treated NTS 3 k) Integrates l) Listens to lom) Identifies learners who n) Keeps mea	a variety of a earners and gended lie of a variety of a earners and gender and remediance needs lie of aningful reconstitutions.	ing classroom tests and assessment sart of assessment component 2 assed as part of a quiz in week 9. assessment modes into teaching to sayives constructive feedback. tes learners' difficulties or misconce	upport learning. ptions, referring
evaluation of learning: of, for and as learning within	Reflective no portfolio and Topic treated NTS 3 k) Integrates I) Listens to lom) Identifies learners who n) Keeps mea parents and I	a variety of a earners and genedate ose needs lie caningful recorded	ing classroom tests and assessment sart of assessment component 2 assed as part of a quiz in week 9. Assessment modes into teaching to sayives constructive feedback. It is learners' difficulties or misconce putside the competency of the teacher of sof every learner and communication.	upport learning. ptions, referring ner. tes progress clearly to
evaluation of learning: of, for and as learning within	Reflective no portfolio and Topic treated NTS 3 k) Integrates l) Listens to lom) Identifies learners who n) Keeps mea parents and I o) Demonstra	a variety of a earners and genedia ose needs lie caningful recorded	ing classroom tests and assessment sart of assessment component 2 assed as part of a quiz in week 9. Assessment modes into teaching to sayives constructive feedback, tes learners' difficulties or misconce putside the competency of the teacherds of every learner and communicates of national and school learning outside the competency of the teacherds of every learner and communicates.	upport learning. ptions, referring ner. tes progress clearly to
evaluation of learning: of, for and as learning within	Reflective no portfolio and Topic treated NTS 3 k) Integrates l) Listens to lom Identifies learners who n) Keeps mea parents and lo Demonstrap) Uses object	a variety of a earners and gand remedia ose needs lie caningful recorders.	ing classroom tests and assessment sart of assessment component 2 assed as part of a quiz in week 9. Assessment modes into teaching to sayives constructive feedback. It is learners' difficulties or misconce putside the competency of the teacher of sof every learner and communication.	upport learning. ptions, referring ner. tes progress clearly to utcomes of learners.
evaluation of learning: of, for and as learning within the lesson	Reflective no portfolio and Topic treated NTS 3 k) Integrates I) Listens to lem) Identifies learners who n) Keeps mea parents and I o) Demonstrap) Uses object	a variety of a earners and g and remedia ose needs lie oaningful recorderners. ates awarene ctive criterion nline Educati	ing classroom tests and assessment sort of assessment component 2 assed as part of a quiz in week 9. Inssessment modes into teaching to strictly stress constructive feedback, test learners' difficulties or misconce putside the competency of the teacheds of every learner and communicates of national and school learning our referencing to assess learners. In a sesources (www.tessafrica.net)	upport learning. ptions, referring ner. tes progress clearly to utcomes of learners.
evaluation of learning: of, for and as learning within the lesson	Reflective no portfolio and Topic treated NTS 3 k) Integrates I) Listens to lem) Identifies learners who n) Keeps mea parents and I o) Demonstra p) Uses object TESSA O.	a variety of a earners and gandingful recorders. at sawarene ctive criterion of the sawarene collection odules (www.	ing classroom tests and assessment sort of assessment component 2 assed as part of a quiz in week 9. Inssessment modes into teaching to strictly stress constructive feedback, test learners' difficulties or misconce putside the competency of the teacheds of every learner and communicates of national and school learning our referencing to assess learners. In a sesources (www.tessafrica.net)	upport learning. ptions, referring ner. tes progress clearly to utcomes of learners.
evaluation of learning: of, for and as learning within the lesson	Reflective no portfolio and Topic treated NTS 3 k) Integrates I) Listens to lem Identifies learners who n) Keeps mea parents and I o) Demonstrap) Uses object TESSA O. T-TEL Mean of the Test Nother Reference of the Test Nother Reference on the Test	a variety of a earners and gandingful recordering awarene ctive criterion odules (www.elevant Online Educantion)	ing classroom tests and assessment sort of assessment component 2 assed as part of a quiz in week 9. Assessment modes into teaching to signess constructive feedback. It is learners' difficulties or misconce outside the competency of the teacheds of every learner and communicates of national and school learning out referencing to assess learners. In it is not constructed in the second construction of the teached const	upport learning. ptions, referring her. tes progress clearly to autcomes of learners.
evaluation of learning: of, for and as learning within the lesson	Reflective no portfolio and Topic treated NTS 3 k) Integrates I) Listens to lem Identifies learners who n) Keeps mea parents and I o) Demonstrap) Uses object TESSA O. T-TEL Mean of the Test Nother Reference of the Test Nother Reference on the Test	a variety of a earners and gearners and remedia ose needs lie of aningful recorderive criterion online Education odules (www.elevant Online rafrica.org,w.ed.	ing classroom tests and assessment sert of assessment component 2 assed as part of a quiz in week 9. Assessment modes into teaching to serves constructive feedback, tes learners' difficulties or misconce outside the competency of the teacheds of every learner and communicates of national and school learning out referencing to assess learners. Total Resources (www.tessafrica.net intelligence).	upport learning. ptions, referring her. tes progress clearly to autcomes of learners.
evaluation of learning: of, for and as learning within the lesson	Reflective no portfolio and Topic treated NTS 3 k) Integrates I) Listens to ld m) Identifies learners who n) Keeps mea parents and I o) Demonstra p) Uses object • TESSA O • T-TEL MO • Other Rewww.oe academy	a variety of a earners and gearners and remedia ose needs lie of aningful recorderive criterion online Education odules (www.elevant Online rafrica.org,w.ed.	ing classroom tests and assessment sort of assessment component 2 assed as part of a quiz in week 9. Assessment modes into teaching to signess constructive feedback. It is learners' difficulties or misconce outside the competency of the teacheds of every learner and communicates of national and school learning out referencing to assess learners. In it is not constructed in the second construction of the teached const	upport learning. ptions, referring her. tes progress clearly to autcomes of learners.
evaluation of learning: of, for and as learning within the lesson	Reflective no portfolio and Topic treated NTS 3 k) Integrates I) Listens to ld m) Identifies learners who n) Keeps mea parents and I o) Demonstra p) Uses object • TESSA O • T-TEL MO • Other Rewww.oe academy	a variety of a earners and gearners and remedia ose needs lie of aningful recording to criterion inline Education odules (www.elevant Online rafrica.org, w.y)	ing classroom tests and assessment sort of assessment component 2 assed as part of a quiz in week 9. Assessment modes into teaching to signess constructive feedback. It is learners' difficulties or misconce outside the competency of the teacheds of every learner and communicates of national and school learning out referencing to assess learners. In it is not constructed in the second construction of the teached const	upport learning. ptions, referring her. tes progress clearly to autcomes of learners.
evaluation of learning: of, for and as learning within the lesson	Reflective no portfolio and Topic treated NTS 3 k) Integrates I) Listens to lom Identifies learners who n) Keeps mea parents and I o) Demonstrap) Uses object T-TEL Mo Other Rewww.oe academy The iBox YouTube	a variety of a earners and gearners and gearners. ates awarenective criterion odules (www.elevant Onlineerafrica.org, wy)	ing classroom tests and assessment sort of assessment component 2 assed as part of a quiz in week 9. Assessment modes into teaching to signess constructive feedback. It is learners' difficulties or misconce outside the competency of the teacheds of every learner and communicates of national and school learning out referencing to assess learners. In it is not constructed in the second construction of the teached const	upport learning. ptions, referring ner. tes progress clearly to utcomes of learners.
evaluation of learning: of, for and as learning within the lesson	Reflective no portfolio and Topic treated NTS 3 k) Integrates I) Listens to lom Identifies learners who n) Keeps mea parents and I o) Demonstra p) Uses object TESSA O. T-TEL Mo. Other Rewww.oe academy The iBox YouTube. Transfor	a variety of a earners and gearners and gearners. ates awarenective criterion inline Educatiodules (www.elevant Online erafrica.org, wy) (CENDLOS)	art of assessment component 2 seed as part of a quiz in week 9. seed as pa	upport learning. ptions, referring ner. tes progress clearly to utcomes of learners.
evaluation of learning: of, for and as learning within the lesson	Reflective no portfolio and Topic treated NTS 3 k) Integrates I) Listens to lom Identifies learners who n) Keeps mea parents and I o) Demonstrap) Uses object TESSA O. T-TEL Mo. Other Rewww.oe academy. The iBox YouTube. Transfor developr	a variety of a earners and ganded lie of a variety of a earners and gand remedia ose needs lie of aningful recording Education odules (www.elevant Online Education odules (www.elevant Online Education odules (www.y) (a (CENDLOS) e coming Teachement guide for	ang classroom tests and assessment so art of assessment component 2 are seed as part of a quiz in week 9. Assessment modes into teaching to so gives constructive feedback, test learners' difficulties or misconce putside the competency of the teacherds of every learner and communicates of national and school learning out referencing to assess learners. Assessment modes into teaching to so since preferency of the teacher o	upport learning. ptions, referring ner. tes progress clearly to utcomes of learners. ucomes, www.col.org, Khan upp work: Professional n (www.t-tel.org).
evaluation of learning: of, for and as learning within the lesson	Reflective no portfolio and Topic treated NTS 3 k) Integrates I) Listens to lo m) Identifies learners who n) Keeps mea parents and I o) Demonstrap) Uses object • TESSA O • T-TEL MO • Other Rewww.oe academy • The iBox • YouTube • Transfor developr • Transfor	a variety of a earners and gended as partiely of a earners and gended and remedia as eneeds lie of aningful recorded aning Education odules (www.elevant Online rafrica.org,w.y) (CENDLOS) (CENDLOS) (CENDLOS) (CENDLOS) (CENDLOS) (CENDLOS) (CENDLOS)	art of assessment component 2 seed as part of a quiz in week 9. assessment modes into teaching to serves constructive feedback. It is learners' difficulties or misconce putside the competency of the teachers of every learner and communicates of national and school learning our referencing to assess learners. In a learner of the teachers of the teachers of the server of the serv	upport learning. ptions, referring ner. tes progress clearly to utcomes of learners. ucomes, www.col.org, Khan upp work: Professional n (www.t-tel.org).
evaluation of learning: of, for and as learning within the lesson	Reflective no portfolio and Topic treated NTS 3 k) Integrates I) Listens to le m) Identifies learners who n) Keeps mea parents and I o) Demonstrap) Uses object • TESSA O • T-TEL Me • Other Rewww.oe academy • The iBox • YouTube • Transfor developr	a variety of a earners and gended as partiely of a earners and gended and remedia as eneeds lie of aningful recorded aning Education odules (www.elevant Online rafrica.org,w.y) (CENDLOS) (CENDLOS) (CENDLOS) (CENDLOS) (CENDLOS) (CENDLOS) (CENDLOS)	and classroom tests and assessment so art of assessment component 2 are seed as part of a quiz in week 9. Assessment modes into teaching to so gives constructive feedback, test learners' difficulties or misconce outside the competency of the teacheds of every learner and communicates of every learner and communicates of national and school learning out referencing to assess learners. Assessment modes into teaching to so sive seed as part of the teached of every learner and communicates of every learner and communicates of every learner and communicates. Assessment modes into teaching of every learners of the teached of every learner and communicates. Assessment modes into teaching of every learners of every learners and learning (2016). Grown tutors. Accra. Ministry of every learner to see the every learner every learner every learner and learning (2016). Grown tutors. Accra. Ministry of every learner every learner every learner every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes	upport learning. ptions, referring ner. tes progress clearly to utcomes of learners. ucomes, www.col.org, Khan upp work: Professional n (www.t-tel.org).
evaluation of learning: of, for and as learning within the lesson	Reflective no portfolio and Topic treated NTS 3 k) Integrates I) Listens to le m) Identifies learners who n) Keeps mea parents and I o) Demonstrap) Uses object • TESSA O • T-TEL MO • Other Rewww.oe academy • The iBox • YouTube • Transfor developr • Educatio	a variety of a earners and gand remedia ose needs lie of aningful recording Education odules (www.elevant Online Education (CENDLOS) extra frica.org, way) The contraction of the contraction	and classroom tests and assessment so art of assessment component 2 are seed as part of a quiz in week 9. Assessment modes into teaching to so gives constructive feedback, test learners' difficulties or misconce outside the competency of the teacheds of every learner and communicates of every learner and communicates of national and school learning out referencing to assess learners. Assessment modes into teaching to so sive seed as part of the teached of every learner and communicates of every learner and communicates of every learner and communicates. Assessment modes into teaching of every learners of the teached of every learner and communicates. Assessment modes into teaching of every learners of every learners and learning (2016). Grown tutors. Accra. Ministry of every learner to see the every learner every learner every learner and learning (2016). Grown tutors. Accra. Ministry of every learner every learner every learner every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes into teaching to see the every learner and communicates. Assessment modes	upport learning. ptions, referring ner. tes progress clearly to utcomes of learners. ucomes, www.col.org, Khan upp work: Professional n (www.t-tel.org).
evaluation of learning: of, for and as learning within the lesson	Reflective no portfolio and Topic treated NTS 3 k) Integrates I) Listens to lo m) Identifies learners who n) Keeps mea parents and I o) Demonstrap) Uses object • TESSA O • T-TEL Mo • Other Rewww.oe academy • The iBox • YouTube • Transfor developr • Educatio • Other Research	a variety of a earners and g and remedia ose needs lie of aningful recorders. ates awarenes ctive criterior inline Educatiodules (www.elevant Online rafrica.org,w.y) (CENDLOS) Timing Teachement guide for iming Teachement guide for (www.t-telelevant Online elevant Online ele	ang classroom tests and assessment so art of assessment component 2 are seed as part of a quiz in week 9. Assessment modes into teaching to so gives constructive feedback, test learners' difficulties or misconce outside the competency of the teacheds of every learner and communicates of a referencing to assess learners. Assessment modes into teaching to so gives constructive feedback, test learners' difficulties or misconce outside the competency of the teached so feed as a seed of every learner and communicates of every learner and school learning out the referencing to assess learners. Assessment modes into teaching of every learners and school learning outside the teached as a seed	upport learning. ptions, referring her. tes progress clearly to utcomes of learners. .org, www.col.org, Khan oup work: Professional in (www.t-tel.org). estioning: Professional
evaluation of learning: of, for and as learning within the lesson	Reflective no portfolio and Topic treated NTS 3 k) Integrates I) Listens to lo m) Identifies learners who n) Keeps mea parents and I o) Demonstrap) Uses object • TESSA O • T-TEL Mo • Other Rewww.oe academy • The iBox • YouTube • Transfor developr • Educatio • Other Research	a variety of a earners and gearners and gearners. at earners. at e	ang classroom tests and assessment so art of assessment component 2 assed as part of a quiz in week 9. Assessment modes into teaching to so a sessessment modes into teaching to so a sesses of national and school learning out a referencing to assess learners. Assessment modes into teaching to so a sessessment modes into a misconce outside the competency of the teach referencing to assess learning out a referencing to assess learners. Assessment modes into teaching of earth teaching and sessessment sesses into a ses	upport learning. ptions, referring her. tes progress clearly to utcomes of learners. .org, www.col.org, Khan oup work: Professional in (www.t-tel.org). estioning: Professional

Required Text (core)	Asamoah-Gyimah, K., &Anane, E. (n.d.). Assessment in basic schools. Cape Coast. Institute of Education. Eshun, P., &Effrim, P. K. (2008). Basics in measurement, evaluation and statistics in education. Cape Coast: Yaci Publications Tamakloe, E. K. Amedahe, F. K., & Atta, E. T. (2005). Principles and methods of teaching. Accra: Black Mask Ltd
Additional Reading List	Alonge, M. F. (2004). Measurement and evaluation in education and psychology (2nd ed.). Ado-Ekiti: Adedogo Pub. Co. Anastasi, A. (1982). Psychological testing (6th ed.). New York: Macmillan Publishing Inc. Archer, F. K. (2002). Measurement and evaluation in education. Kumasi: Paks. Burke, J. & Larry, C. (2008). Educational research: Quantitative, qualitative, and mixed approaches. New York: Sage Publication. Carey, L. M. (2001). Measuring and evaluating school learning. Boston: Allyn Bacon. Gronlund, E. (2003). Assessment of students' achievement. (7th ed.). Boston: McGrawHill. Nitko, A. J. (2001). Educational assessment of students (3rd ed.). New Jersey: Prentice-Hall. Onivehu, A. O. &Amoah, S. A. (2002). Essentials of measurement and evaluation. Accra: K. 'N' B. Publishers.
CPD needs	Determining reliability and validity of test items

Year of B.Ed. 2 Semester 1 Place of lesson in semester 12345678 9 10 11 12

Title of Lesson	Assessmer	nt procedur	Lesson Duration	3 Hours					
Previous student teacher knowledge, prior learning (assumed)	This lesson aims to prepare student teachers to assess students through, projects and assignments among others. It tries to assist students to effectively evaluate performance assessment tasks, considering gender and learners with diverse strengths in inclusive and multi-grade classrooms Student teachershave knowledge about achievement test.								
Possible barriers to learning in the lesson	Students n	Students may not be familiar with the various inclusive settings in the classroom.							
Lesson Delivery – chosen to support student teachers in achieving the outcomes	Face-to- face [v	Practica I Activity [V]	Work- Based Leaning	Seminars [\forall]	Independe Study [v]	e-learning opportunities	Practicum		
Lesson Delivery – main mode of delivery chosen to support student teachers in achieving the learning outcomes.	Face-to-face: Concept mapping/cartooning for meaning and characteristics of the types of authentic or performance assessment. Seminar:Studentsparticipate in a seminar session Independent study:student teachers engage with relevant and appropriate curriculum and discusses the procedures for planning inclusive classroom tests and assessments. Practical Activity:Group presentations of how to plan and develop authentic/performance assessment tasks for inclusive and multi-grade classrooms								
 Overarching outcome, what you want the student teachers to achieve, serves as basis for the learning outcomes. An expanded version of the description. Write in full aspects of the NTS addressed 	inclusive and multi-grade classrooms (NTECF; NTS 3k, 3l, 3p).								
Learning Outcome for the lesson, picked and developed from the course specification Learning indicators for each learning outcome	Learning Outcomes Learning Indicators			rs	issues – core transferable inclusivity, ed addressing di	skills, quity and versity. How addressed or			
	understand planning a developing performan assessmen considerin learners w strengths i and multi- classrooms	LO 7. demonstrate inderstanding, lanning and eveloping authentic/erformance issessment tasks, onsidering gender and arners with diverse irengths in inclusive and multi-grade assrooms (NTECF; TS 3k, 3l, 3p).		haracteristic	nd discuss the softhe types performance asks. eloperformance asks for	Personal dev Learning abo assessment Respect and	p s elopment: ut planning diversity: ng the various		

Topic Title: Assessment procedures for inclusive classrooms	Sub-topic	Stage/time	Teaching and learning activities to achieve outcomes depending on the delivery mode selected. Teacher-led collaborative group work or independent.			
			Teacher Activity	Student Activity		
	Introduction	20 minutes	Face-to-face Reviews RPK using questions and answers on planning andadministering test (PD theme 2)	Provide relevant answers to questions posed and applying the knowledge gained during STS.		
	The concept authentic/perf ormance assessment	40 minutes	Face-to-face: Tutor uses concept mapping/cartooning for meaning and characteristics of the types of authentic or performance assessment.	Face-to-face: Student teachers participate in lesson and use their STS experience to answer questions.		
	Principles of fair assessment	60 minutes	Seminar: Tutor invites an expert in assessment to facilitate a session	Seminar: Student teachers participate in the sessions.		
	Learning stories approach andsocio- cultural approach.	60 minutes	Practical Activity: Tutor guides students to work in groups on Learning stories approach and socio-cultural approach in assessment. Class must take into consideration diverse students with different background and multi- grades.	Practical Activity: Students participate in groups.		
Lesson assessments –	In-lesson Assess	ment: Group p		icipation shouldbegraded as		
evaluation of learning: of, for and as learning within the lesson	In-lesson Assessment: Group presentation and seminar participation shouldbegraded as part of Component 2. Assessment Component 2: Quiz Topics treated from lesson 5 to 8 should be part of a quiz to be scores 20% Presentation of assignment on test item construction and scoring guide.					
	NTS 3 k) Integrates a variety of assessment modes into teaching to support learning. l) Listens to learners and gives constructive feedback. m) Identifies and remediates learners' difficulties or misconceptions, referring learners whose needs lie outside the competency of the teacher. n) Keeps meaningful records of every learner and communicates progress clearly to parents and learners. o) Demonstrates awareness of national and school learning outcomes of learners. p) Uses objective criterion referencing to assess learners.					
Instructional Resources	 TESSA Online Educational Resources (<u>www.tessafrica.net</u>) T-TEL Modules (<u>www.t-tel.org</u>). Other Relevant Online Resources (<u>www.Tess-india.net</u>, <u>www.oerafrica.org, www.futureLearn.com</u>, <u>www.telmooc.org</u>, <u>www.col.org</u>, <u>Khan</u> academy) The iBox (CENDLOS) 					

	YouTube
	Transforming Teacher Education and Learning (2016). Group work: Professional
	development guide for tutors. Accra. Ministry of Education (www.t-tel.org).
	Transforming Teacher Education and Learning (2016). Questioning: Professional
	development guide for tutors. Accra. Ministry of
	Education (www.t-tel.org).
	\ <u></u> /
	Other Relevant Online Resources (<u>www.Tess-india.net</u> ,
	<u>www.oerafrica.org,www.futureLearn.com</u> , <u>www.telmooc.org</u> , <u>www.col.org, Khan</u>
	academy)
Required Text (core)	Asamoah-Gyimah, K., & Anane, E. (n.d.). Assessment in basic schools. Cape Coast. Institute
	of Education.
	Eshun, P., &Effrim, P. K. (2008). Basics in measurement, evaluation and statistics in
	education. Cape Coast: Yaci Publications
	Tamakloe, E. K. Amedahe, F. K., & Atta, E. T. (2005). Principles and methods of teaching.
	Accra: Black Mask Ltd
Additional Reading List	Alonge, M. F. (2004). Measurement and evaluation in education and psychology (2nd ed.).
	Ado-Ekiti: Adedogo Pub. Co.
	Anastasi, A. (1982). Psychological testing (6th ed.). New York: Macmillan Publishing Inc.
	Archer, F. K. (2002). Measurement and evaluation in education. Kumasi: Paks.
	Burke, J. & Larry, C. (2008). Educational research: Quantitative, qualitative, and mixed
	approaches. New York: Sage Publication.
	Carey, L. M. (2001). <i>Measuring and evaluating school learning</i> . Boston: Allyn Bacon.
	Gronlund, E. (2003). Assessment of students' achievement. (7th ed.). Boston: McGrawHill.
	Nitko, A. J. (2001). Educational assessment of students (3rd ed.). New Jersey: Prentice-
	Hall.
	Onivehu, A. O. &Amoah, S. A. (2002). Essentials of measurement and evaluation. Accra: K.
	'N' B. Publishers.
CDD woods	
CPD needs	Workshop on item analysis
	l

Year of B.Ed. 2 Semester	1	Place of lesson in semester	123456789 10 11 12
--------------------------	---	-----------------------------	--------------------

Title of Lesson	Assessment procedures fo	r inclusive	classrooms					
	(2)				on Dura		3 Hours	
Lesson description	This lesson aims to prepare student teachers to assess students through, projects and assignments among others. It tries to assist students to effectively evaluate performance assessment tasks, considering gender and learners with diverse strengths in inclusive and multi-grade classrooms							nce
Previous student teacher knowledge, prior learning (assumed)	Student teachers have knowledge about characteristics of the types of authentic or performance assessment.							
Possible barriers to learning in the lesson	Students may not be famil	iar with the	e various incl	usive se	ttings in	the classroo	m.	
Lesson Delivery – chosen to support student teachers in achieving the outcomes	Face-to-face [Practical Activity [\forall]	Work- Based Leaning	Seminars [\forall]	Indepe Study	endent [√]	e-learning opportuniti	Practic	um
mode of delivery chosen to support student teachers in achieving the learning outcomes. Overarching outcome, what you want the student teachers to achieve, serves as basis for the learning outcomes. An expanded version of the description. Write in full	Independent study:student teachers engage with relevant and appropriate curriculum and discusses the procedures for planning inclusive classroom tests and assessments. Practical Activity: Group presentations of how to plan and develop authentic/performance assessment tasks for inclusive and multi-grade classrooms Demonstrate the understanding of assessing performance and related assignments for inclusive and multi-grade classrooms (NTECF; NTS 3k, 3l, 3p).							
aspects of the NTS addressed • Learning Outcome for the lesson, picked and	Learning Outcomes	Learning	Indicators			Identify wh cutting issu transferabl	ies – core ar	nd
developed from the course specification • Learning indicators						will these be developed	diversity. Hose addressed?	
for each learning outcome	CLO 7. demonstrate understanding, planning and developing authentic/ performance assessment tasks, considering gender and learners with diverse strengths in inclusive and multi-grade classrooms (NTECF; NTS 3k, 3l, 3p).	asse discuthe tauth asse Plan auth asse	ain authentic ssment and uss the chara ypes of entic/perfore ssment tasks and develop entic/perfore ssment tasks multi-grade of	cteristic mance mance for incl	s of usive	through gro presentation Personal do Learning all assessmen	evelopment: cout plannin t d diversity: ding the lusive	

Topic Title: Assessment procedures for inclusive classrooms	Sub-topic	Stage/time	Teaching and learning activities to achieve outcomes depending on the delivery mode selected. Teacher-led collaborative group work or independent.			
(2)			Teacher Activity	Student Activity		
	Introduction	20 minutes	Face-to-face Reviews RPK using questions and answers on planning and administering test (PD theme 2)	Provide relevant answers to questions posed and applying the knowledge gained during STS.		
	Using types of observation, check lists, and rating scales	40 minutes	Face-to-face: Tutor uses concept mapping/cartooning for using types of observation, check lists, and rating scales	Face-to-face: Student teachers participate in lesson and use their STS experience to answer questions.		
	Clinical interviews, conversation	60 minutes	Seminar: Guide student teachers to use phones to search for meaning of clinical interviews. Students are paired and they take turns tointerview each other based on the principles learnt from the seminar.	Seminar: Student teachers participate in the sessions.		
	Gallery work; project development; task analysis; and building portfolios	60 minutes	Practical Activity: Put students in small groups. Assign topics to them to work on and present in class. Presentation should be part of portfolios. Topics Observation Work sheets Task analysis Projects Rating scales	Practical Activity: Students participate in groups and reflect their experiences during STS. Groups present to whole class		
Lesson assessments –			Tally sheets etc	cipation shouldbegraded as part		
evaluation of learning: of, for and as learning within the lesson	NTS 3 k) Integrates a l) Listens to lea m) Identifies ar learners whose n) Keeps meani parents and lea o) Demonstrate	NTS 3 (c) Integrates a variety of assessment modes into teaching to support learning. (d) Listens to learners and gives constructive feedback. (e) Identifies and remediates learners' difficulties or misconceptions, referring earners whose needs lie outside the competency of the teacher. (f) Keeps meaningful records of every learner and communicates progress clearly to parents and learners. (f) Demonstrates awareness of national and school learning outcomes of learners. (f) Uses objective criterion referencing to assess learners.				
Instructional Resources	 TESSA Online Educational Resources (www.tessafrica.net) T-TEL Modules (www.t-tel.org). Other Relevant Online Resources (www.Tess-india.net, www.oerafrica.org, www.futureLearn.com, www.telmooc.org, www.col.org, Khan academy) The iBox (CENDLOS) 					

	YouTube								
	 Transforming Teacher Education and Learning (2016). Group work: Professional 								
	development guide for tutors. Accra. Ministry of Education (www.t-tel.org).								
	 Transforming Teacher Education and Learning (2016). Questioning: Professional 								
	development guide for tutors. Accra. Ministry of								
	Education (<u>www.t-tel.org</u>).								
	Other Relevant Online Resources (<u>www.Tess-india.net</u> ,								
	www.oerafrica.org,www.futureLearn.com, www.telmooc.org, www.col.org, Khan								
	academy)								
	•								
Required Text (core)	Asamoah-Gyimah, K., & Anane, E. (n.d.). Assessment in basic schools. Cape Coast. Institute of								
	Education.								
	Eshun, P., &Effrim, P. K. (2008). Basics in measurement, evaluation and statistics in								
	education. Cape Coast: Yaci Publications								
	Tamakloe, E. K. Amedahe, F. K., & Atta, E. T. (2005). Principles and methods of teaching.								
	Accra: Black Mask Ltd								
Additional Reading List	Alonge, M. F. (2004). Measurement and evaluation in education and psychology (2nd ed.).								
	Ado-Ekiti: Adedogo Pub. Co.								
	Anastasi, A. (1982). Psychological testing (6th ed.). New York: Macmillan Publishing Inc.								
	Archer, F. K. (2002). Measurement and evaluation in education. Kumasi: Paks.								
	Burke, J. & Larry, C. (2008). Educational research: Quantitative, qualitative, and mixed								
	approaches. New York: Sage Publication.								
	Carey, L. M. (2001). <i>Measuring and evaluating school learning</i> . Boston: Allyn Bacon.								
	Gronlund, E. (2003). Assessment of students' achievement. (7th ed.). Boston: McGrawHill.								
	Nitko, A. J. (2001). Educational assessment of students (3rd ed.). New Jersey: Prentice-Hall.								
	Onivehu, A. O. & Amoah, S. A. (2002). Essentials of measurement and evaluation. Accra: K. 'N'								
	B. Publishers.								
CPD needs	Performance and authentic assessment								

Year of B.Ed. 2	2	Semester	1	Place of lesson in semester	12345678910 11 12
-----------------	---	----------	---	-----------------------------	-------------------

Title of Lesson	Data presentati	on and Inte	rpretation	of tests				
	and authentic a		•		Lesson Duration	า	3 Hours	
Lesson description	This lesson aims to prepare students teachers to acquire a repertoire of knowledge and skills to enable them apply appropriate techniques, processes and procedures to gather relevant data from differently abled middle childhood learners in inclusive and multi-grade setting in order to support their learning.							
Previous student teacher				out characte	ristics of the typ	es of au	thentic o	or
knowledge, prior learning (assumed)	performance as							
Possible barriers to learning in the lesson					lusive settings in			
Lesson Delivery – chosen to support student teachers in achieving the outcomes	Face-to-face [v]	Practical Activity [V]	Work- Based Leaning	Seminars [$\sqrt{\ }$]	Independent Study [1/]		ning tunities	Practicum
Lesson Delivery – main mode of delivery chosen to support student teachers in achieving the learning outcomes.	Face-to-face: Concept mapping/cartooning to discuss descriptive statistics and its application in interpreting assessment results. Seminar: Studentsparticipate in a seminar session. Independent study: student teachers engage with relevant and appropriate previous assessment instruments and discuss validity and reliability issues.							
 Overarching outcome, what you want the student teachers to achieve, serves as basis for the learning outcomes. An expanded version of the description. Write in full aspects of the NTS addressed 			_		-referenced and n various aspect			
Learning Outcome for the lesson, picked and developed from the course specification Learning indicators for each learning	Learning Outco	mes	Learn	ng Indicato	rs	cutting transf inclusion addre will th	erable sk ivity, equ ssing div	- core and cills, uity and ersity. How ddressed
outcome	CLO 8. demonst understanding a norm-reference criterion-refere of interpreting t manage data ga various aspects learners (NTS 3	and use of ed and nced modes tests and athered on of the	a: d d u le D a: SI	se results to arning of divessign differencessessment for the inclusive demonstrate arterenced meresults.	rners with s, analyse and support verse learners. entiated or learners with we settings. how norm- nd criterion-	through present Person Learning project Respective Collection	ing abou ct work ct and di	opment: t assessing versity: on various

Topic Title: Data presentation and Interpretation of tests and	Sub-topic	Stage/time	Teaching and learning activities to achieve outcomes depending on the delivery mode selected. Teacher-led collaborative group work or independent.				
authentic assessment data			Teacher Activity	Student Activity			
	Introduction	20 minutes	Face-to-face Reviews RPK using questions and answers on assessing project work and portfolio (PD theme 2)	Face-to-face Provide relevant answers to questions posed and applying the knowledge gained during previous class practical activities			
	Descriptive statistics	40 minutes	Face-to-face: Use illustrations to facilitate session on the use of basic descriptive statistics for test data analysis. The use of mean, median and mode	Face-to-face: Student teachers participate in lesson and try their hands on examples and hypothetical cases given.			
	Norm- referenced and criterion criterion- referenced interpretation of data	60 minutes	Face-to-face & e-learning Guide student to use phones to search for meaning of Norm- referenced and criterion criterion-referenced and how they are used for interpretation of data	Face-to-face & e-learning Student teachers participate in the sessions by using phones to search for information and share			
	Validity and reliability issues	60 minutes	Practical Activity: Tutor discusses with student-teachers data collection techniques and the importance of ensuring the validity and reliability of such instruments. The class uses knowledge gained to critique different assessment instruments.	Practical Activity: Students participate in groups and reflect their experiences in their journals.			
Lesson assessments –	In-lesson Asses	sment: Presen	tation of tasks assigned to stude	ents			
evaluation of learning: of,							
for and as learning within	NTS 3						
the lesson	I) Listens to lear m) Identifies an learners whose n) Keeps meani parents and lea o) Demonstrate p) Uses objectiv	rners and gives d remediates I needs lie outs ngful records o rners. es awareness o ve criterion ref	of assessment modes into teaching to support learning. and gives constructive feedback. adiates learners' difficulties or misconceptions, referring lie outside the competency of the teacher. accords of every learner and communicates progress clearly to eness of national and school learning outcomes of learners. rion referencing to assess learners.				
Instructional Resources	 TESSA Online Educational Resources (www.tessafrica.net) T-TEL Modules (www.t-tel.org). Other Relevant Online Resources (www.Tess-india.net, www.oerafrica.org, www.futureLearn.com, www.telmooc.org, www.col.org, Khan academy) The iBox (CENDLOS) YouTube Transforming Teacher Education and Learning (2016). Group work: Professional development guide for tutors. Accra. Ministry of Education (www.t-tel.org). Transforming Teacher Education and Learning (2016). Questioning: Professional development guide for tutors. Accra. Ministry of Education (www.t-tel.org). Other Relevant Online Resources (www.Tess-india.net, 						

	www.oerafrica.org,www.futureLearn.com, www.telmooc.org, www.col.org, Khan
	academy)
Required Text (core)	Asamoah-Gyimah, K., &Anane, E. (n.d.). <i>Assessment in basic schools</i> . Cape Coast. Institute of
	Education.
	Eshun, P., &Effrim, P. K. (2008). Basics in measurement, evaluation and statistics in
	education. Cape Coast: Yaci Publications
	Tamakloe, E. K. Amedahe, F. K., & Atta, E. T. (2005). Principles and methods of teaching.
	Accra: Black Mask Ltd
Additional Reading List	Alonge, M. F. (2004). Measurement and evaluation in education and psychology (2nd ed.).
	Ado-Ekiti: Adedogo Pub. Co.
	Anastasi, A. (1982). Psychological testing (6th ed.). New York: Macmillan Publishing Inc.
	Archer, F. K. (2002). Measurement and evaluation in education. Kumasi: Paks.
	Burke, J. & Larry, C. (2008). Educational research: Quantitative, qualitative, and mixed
	approaches. New York: Sage Publication.
	Carey, L. M. (2001). <i>Measuring and evaluating school learning</i> . Boston: Allyn Bacon.
	Gronlund, E. (2003). Assessment of students' achievement. (7th ed.). Boston: McGrawHill.
	Nitko, A. J. (2001). Educational assessment of students (3rd ed.). New Jersey: Prentice-Hall.
	Onivehu, A. O. &Amoah, S. A. (2002). Essentials of measurement and evaluation. Accra: K. 'N'
	B. Publishers.
CPD needs	Workshop on using descriptive statistics for data analysis
	,

Year of B.Ed. 1 Semester 2 Place of lesson in set	mester 12345678910 11 12
---	---------------------------------

Title of Lesson	Data prese			ation of tests	s and	Lessor	n Duration	3 Hours
Lesson description	This lesson aims to prepare students teachers to acquire a repertoire of knowledge and skills to enable them apply appropriate techniques, processes and procedures to gather relevant data from differently abled middle childhood learners in inclusive and multigrade setting in order to support their learning.							
Previous student teacher knowledge, prior learning (assumed) Possible barriers to	Student teachers have knowledge about characteristics of the types of authentic or performance assessment.							
learning in the lesson Lesson Delivery – chosen to support student teachers in achieving the outcomes	Face-to- face [V	face [V I Based [V] t Study [V] opportunitie						Practicum
Lesson Delivery – main mode of delivery chosen to support student teachers in achieving the learning outcomes.	Face-to-face: Concept mapping/cartooning to discuss descriptive statistics and its application in interpreting assessment results. Seminar:Studentsparticipate in a seminar session. Independent study: student teachers discusses the use of feedback obtained from assessment							
 Overarching outcome, what you want the student teachers to achieve, serves as basis for the learning outcomes. An expanded version of the description. Write in full aspects of the NTS addressed 	modes of interpreting tests and manage data gathered on various aspects of the learners (NTS 3p).							
Learning Outcome for the lesson, picked and developed from the course specification Learning indicators for each learning outcome	Learning O	utcomes	Learn	ing Indicator	rs		issues – core transferable inclusivity, e addressing o	skills,
	CLO 8. dem understand of norm-re- and criterid referenced interpreting manage da on various the learner	ling and use ferenced on- modes of g tests and ta gathered aspects of	e as as d under the control of the c	collect data of spects of lead ifferent tools see results to see results to see results to see results of the sees	rners with s, analyse support verse learner learner ve setting how nor d criterio odes of	n and eners. s with s. m-	project work Respect and	up ns velopment: out assessing c diversity: ata on various

Topic Title: Data presentation and Interpretation of tests and	Sub-topic	Stage/ time	Teaching and learning activities to achieve out depending on the delivery mode selected. Tea collaborative group work or independent.			
authentic assessment data			Teacher Activity	Student Activity		
	Introduction	20 minutes	Face-to-face Reviews RPK using questions and answers on assessing project work and portfolio (PD theme 2)	Face-to-face Provide relevant answers to questions posed and applying the knowledge gained during previous class practical activities		
	Types of feedback	60 minutes	Face-to-face: Tutor uses concept mapping/cartooning discuss types of feedback obtained from assessment	Face-to-face: Student teachers participate in lesson and use their previous class practical activities to answer questions.		
	How to use feedback	60 minutes	Seminar: Tutor invites two other tutors to serve as resources persons and discuss how to use feedback obtained from assessment with class. The class must discuss how to analyse and use results to support learning of diverse learners.	Seminar: Student teachers participate in the sessions.		
	Conclusion of lesson/evaluation	40 minutes	Practical Activity: Tutor assign students into groups based on their Halls they belong to in their college. They discuss all the subtopics in the course and provide a brief presentation of what they have learnt.	Practical Activity: Students participate in groups and reflect their experiences in their journals.		
Lesson assessments – evaluation of learning: of, for and as learning within the lesson	In-lesson Assessment: Participation in discussion and answering of questions orally Component 3: 40% Selected topic treated from lesson 1 to 12 should be part of end of semester exams. CLOs 1 to 7 NTS 3 k) Integrates a variety of assessment modes into teaching to support learning. l) Listens to learners and gives constructive feedback. m) Identifies and remediates learners' difficulties or misconceptions, referring learners whose needs lie outside the competency of the teacher. n) Keeps meaningful records of every learner and communicates progress clearly to parents and learners. o) Demonstrates awareness of national and school learning outcomes of learners.					
Instructional Resources	 o) Demonstrates awareness of national and school learning outcomes of learners. p) Uses objective criterion referencing to assess learners. TESSA Online Educational Resources (www.tessafrica.net) T-TEL Modules (www.t-tel.org). Other Relevant Online Resources (www.Tess-india.net, www.oerafrica.org, www.futureLearn.com, www.telmooc.org, www.col.org, Khan academy) The iBox (CENDLOS) YouTube 					

	Transforming Teacher Education and Learning (2016). Group work: Professional
	development guide for tutors. Accra. Ministry of Education (www.t-tel.org).
	Transforming Teacher Education and Learning (2016). Questioning: Professional
	development guide for tutors. Accra. Ministry of
	Education (<u>www.t-tel.org</u>).
	Other Relevant Online Resources (<u>www.Tess-india.net</u> ,
	www.oerafrica.org,www.futureLearn.com, www.telmooc.org, www.col.org, Khan
	academy)
Required Text (core)	Asamoah-Gyimah, K., &Anane, E. (n.d.). Assessment in basic schools. Cape Coast. Institute
	of Education.
	Eshun, P., &Effrim, P. K. (2008). Basics in measurement, evaluation and statistics in
	education. Cape Coast: Yaci Publications
	Tamakloe, E. K. Amedahe, F. K., & Atta, E. T. (2005). Principles and methods of teaching.
	Accra: Black Mask Ltd
Additional Reading List	Alonge, M. F. (2004). Measurement and evaluation in education and psychology (2nd ed.).
	Ado-Ekiti: Adedogo Pub. Co.
	Anastasi, A. (1982). Psychological testing (6th ed.). New York: Macmillan Publishing Inc.
	Archer, F. K. (2002). Measurement and evaluation in education. Kumasi: Paks.
	Burke, J. & Larry, C. (2008). Educational research: Quantitative, qualitative, and mixed
	approaches. New York: Sage Publication.
	Carey, L. M. (2001). <i>Measuring and evaluating school learning</i> . Boston: Allyn Bacon.
	Gronlund, E. (2003). Assessment of students' achievement. (7th ed.). Boston: McGrawHill.
	Nitko, A. J. (2001). Educational assessment of students (3rd ed.). New Jersey: Prentice-
	Hall.
	Onivehu, A. O. & Amoah, S. A. (2002). Essentials of measurement and evaluation. Accra: K.
	'N' B. Publishers.
CPD needs	Using assessment data