

Four-Year B.Ed. Course Manual

PEDAGOGY: DIFFERENTIATED ASSESSMENT

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.

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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	Differentia	ted Asse	ssment for Prin	mary Schools	5					
Course Code				Course		Credit	value:	3	Semest	er 2
				Level: 200						
Pre-requisite	Introductio	Introduction to School based Inquiry, Differentiated Learning and Curriculum Planning								
Course	Face-to-	Practi	Work-	seminars	Ind	lepend	ent	e-learnii	0	Practicum: []
Delivery	face: [v]	cal	based	[V]	Stu	ıdy: [√]		opportu	nities[√]	
Modes		activi	learning [V]							
-		ty[√]								
Course								•	•	ples of differentiated
Description										rimary through to the
for significant learning										arious forms and types
(indicate NTS,									-	evel expectations and ine various processes
NTECF, BSC								-		d interpret results for
GLE to be		-	-	-				-	-	assessment tools and
addressed)			-							chers will be engaged
· · · · · · · · · · · · · · · · · · ·										le level activities. They
										re meant for students
	teachers to	o acquire	e a repertoire	of knowledg	ge ai	nd skill	s to en	able them	apply ap	propriate techniques
	processes a	and pro	cedures to gat	her relevant	: dat	ta from	n differe	ently abled	d middle	childhood learners in
								-		ill also explore issues
							-			and passion, creativity
				,			0	•••		ers' Standard: 1c, 1e,
0			rosscutting issu			<u> </u>			titudes).	
Course Learning	teachers w	-	letion of the co	ourse, stude	nt	Ir	ndicator	S		
Outcomes			knowledge, ur	derstanding	of	•	Evan	aina tha ar	inciplos o	f difforantiated
outcomes			ntiated assessn	-	01	•		ssment	incipies o	f differentiated
			ent such as as		sting	z, •			racteristic	cs of basic concepts
			evaluation and		-	,				, measurement, and
			, 3l, 3p; NTECF							purposes of
							asse	ssment.		
						•	Diffe	rentiate ar	nong asse	essment, test,
							mea	surement,	and evalu	ation.
			knowledge, ur			• k	Iden	tify the typ	es of asse	essments
			or learning/of I	-		•	Exan	nine what o	constitute	s assessment for
	learning th	rough pr	ojects (NTECF;	NTS 3k, 3l, 3	m, 3	sp).		-	rning and	as learning through
							proje			
			knowledge an		ding	of •		-		xpectations for
	-		ectations and as		21	21		lle childho		
	3p;NTECF).	S IOF Das	ic schools in Gh	iaria (in 13 3g,	ЗК,	31, •		-		xpectations and
	SP,NTECFJ.									for upper primary
	CLO 4 dem	onstrate	understanding	and use of		•	-	ers in Ghar nerate the		setting learning
			appropriate le	-	tives			ctives.		
	-		ation to the va				-		prehensiv	e and appropriate
			plans(NTECF; N							outcomes in line with
	Ŭ	0	,	, , ,						earning in learning
							plan			0
	CLO 5. dem	onstrate	understanding	g and develop	ome	nt •			ng guide	for constructed test
			or constructed i	•						ay type) for a selected
	Ĭ	-								

	 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 a assessments(NTECF; NTS 3f, 3g). CLO 7. demonstrate understanding, planning and developing authentic/ performance assessment ta 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 norr referenced and criterion-referenced modes of interpreting tests and manage data gathered on various aspects of the learners (NTS 3p). 			 Apply the procedures for planning and designing inclusive classroom tests and assessments. Explain authentic/performance assessment and discuss the characteristics of the typ authentic/performance assessment tasks. Plan and develop authentic/performance assessment tasks for inclusive and multiclassrooms. 8.1 Collect data on various aspects of lear with different tools, analyse and use rest support learning of diverse learners. 8.2 Design differentiated assessment for learners with SEN in inclusive settings. 8.3 Demonstrate how norm-referenced a criterion-referenced modes of interpretintests 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 prmative and valuation; scales	Tutor-led discussions on definition and nature of assessment; Individual and group presentations on nature of assessment; Concept mapping/cartooning on meaning and nature of assessment.	
	2	Principles, forms and purposes of assessment	Learning (AoL	ourposes of Assessment of .), Assessment as .), Assessment for	Teacher-led discussion on the meaning and principles of assessment; Individual and group presentations on purposes of assessment; Individual and group projects on classroom activities that suit assessment of learning (AoL), assessment as learning (AaL), and assessment for learning (AfL).	
	3	Types of assessment	assessment; r	sessment; assessment; ative and sessment; s, merits and ontinuous school-based standards-based national enchmarks; grade tions for basic	Tutor-led discussion on types of assessment; Group presentation and discussion on characteristics, merits and demerits of continuous assessment; Concept mapping/cartooning on school- based, standards-based assessments, and national assessment benchmarks; Tutor-led discussion on grade level expectations for basic education in Ghana.	

	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.	
	6 Planning classroom tests and assessment		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.	
			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 Assessment (Educative assessment: of, for and as learning)	SelectedMidternReflectiv	d items of students work n assessment = 20% ve Journal = 40%	ment (30% overall score) : (3 of them -10% each) = 30% folio = 10% (how it is presented /o		
	expectations and science. Write a s P5 teacher. Weighting: 30%	l assessment bench mar			

¹See 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.
(Core)	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 Booding List	Alonge, M. F. (2004). <i>Measurement and evaluation in education and psychology</i> (2nd ed.). Ado-Ekiti:
Reading List	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). <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.

²See rubrics on Subject Project Assessment in Annex 6 of NTEAP

Year of B.Ed.

Semester

2

1

Place of lesson in semester

12345678910 <u>11 12</u>

Title of Lesson	Principles and nature of differ	continted acconsement						
	Principles and nature of different		Lesson Duration					
Lesson description	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 for the Junior High School education.							
Previous student teacher knowledge, prior learning (assumed)	Student teachers have obser schools. This first lesson introduces assessment components of t	ved their mentors asses student teachers to t	-		-			
Possible barriers to learning in the lesson	Student teachers may not ha have misconceptions about a The have also taken a course appreciate the differences in	ve been practically invo ssessment. e in inclusive school-bas	ed inquiry and	psychology to e	-			
Lesson Delivery – chosen to support student teachersin achieving the outcomes	Face-to-face Practical [√] Activity	Work- Based LeaningSeminars [√]	Independent Study [√]		Practicum			
Lesson Delivery – main mode of delivery chosen to support student teachers in achieving the learning outcomes.	Face-to-face – Discussion; Co e-learning opportunities – th Seminars: student and /or tu Independent study: Individua	e use of on-line resourc tor led discussion and re	es and digital de eflections from S	evices. STS experiences.	sessment.			
 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 an understandi upper primary schools (NTS 3	• • •	d concepts of d	differentiated ass	sessment in			
 Learning Outcome for the lesson, picked and developed from the course specification Learning indicators 	Learning Outcomes	Learning Indicators	iss ski ad th	entify which cross ues – core and tr ills, inclusivity, eq dressing diversity ese be addressed veloped?	ansferable juity and y. How will			
for each learning outcome	CLO 1. Demonstrate knowledge, understanding of basic principles and concepts in differentiated assessment such as assessment, testing, measurement and evaluation and the purposes of assessment (NTS 3k, 3l, 3p; NTECF p.46).	 Analyse the princ differentiated ass Explain the chara of basic concepts assessment, test, measurement, ar evaluation, as we purposes of asses Differentiate amo assessment, test, 	iples of Co cessment in cteristics pro- such as Dip lin nd de Il as the Pe ssment. Th ong de	immunication ski dividual and grou esentations gital literacy: the e resources and o vices. rsonal developm rough presentati veloping of argur uity and inclusivi rious types of grou	p use of on- digital ent: on and ments. ty: using			

Topic Title:			measurement, and evaluation. Teaching and learning activities t	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. T 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	20 minutes	Reviews RPK through questioning how they observed their mentors assess learners during their STS a why assessment should be differentiated.	on course.
	Identification and explanation of characteristics and basic concepts		Guide student teachers to use the phones to search for the meaning differentiated assessment or guid them by providing prompts from their supported teaching experiences. Let tutors think-pair and share Their views on the principles of differentiated assessment.	eir knowledge in g of psychology.
		20 minutes	Use concept cartoons to initiate a discussion on meaning and characteristics of concepts such a assessment, test, measurement, a evaluation, as well as the purpose of assessment.	Pairs share their views s on principles of and differentiated
				Engage in discussion of concepts.
	Differences among assessment, test, measurement, and evaluation.	1 hour	Independent learning Student teachers are assignedinto 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	50 minutes	Use pyramid discussions to	Shares experiences with
	differentiated		generate interactions on	based on STS experiences
	assessment		purposes of age appropriate	based on 515 experiences
	and purposes of assessment		assessment citing illustrations	
		40	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 –			ual and group presentation on princi	
evaluation of learning: of,	differentiated as	ssessment, cor	nceptual distinctions and purposes of	f assessment.
for and as learning within	CLO 1			
the lesson	NTS			
	h)Sets meaningf	ul tasks that e	ncourages learner collaboration and	leads to
	purposeful learr	ning.		
	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			-
		0		
Instructional Resources	1. TESSA	Online Educati	onal Resources (<u>www.tessafrica.net</u>)	. T-TEL Modules (www.t-
	tel.org)		·,	·
	,		e Resources (www.Tess-india.net,	
			ww.futureLearn.com, www.telmooc.	org, www.col.org, Khan
	acaden		<u></u>	
		x (CENDLOS)		
	4. YouTub	. ,		
Required Text (core)			, E. (n.d.). Assessment in basic school	s Cane Coast Institute of
Required Text (core)	Education.			s. cape coast. Institute of
		D K (2008)	Basics in measurement, evaluation a	and statistics in education
	Cape Coast: Yac		busics in measurement, evaluation t	
	•		., & Atta, E. T. (2005). Principles and	mathada of tagahing Acara
	Black Mask Ltd	Ameuane, r. K	., & Atta, E. T. (2003). Principles und	methods of teaching. Actra.
Additional Reading List			ment and evaluation in education an	d neuchology (2nd od)
Additional Reading List	•		ment and evaluation in education an	ia psychology (211a ea.).
	Ado-Ekiti: Adedo	0	ical tacting (6th ad) Now Varke Mag	millon Dubliching Inc
	, , ,	, , ,	cal testing (6th ed.). New York: Macı	0
	· ·		nent and evaluation in education. Ku	
			ucational research: Quantitative, qua	alitative, ana mixea
	approaches. Ne			
		• •	and evaluating school learning. Bos	
	, ,		nt of students' achievement. (7th ed	
			assessment of students (3rd ed.). No	
	-	Amoah, S. A.	2002). Essentials of measurement a	nd evaluation. Accra: K. 'N'
	B. Publishers.			
CPD needs	E-Assessment in	Primary Scho	ols. Principles and nature of different	tiated assessment

Year of B.Ed. 2 Set	mester 1 Place	of less	on in sem	ester 12	2 3 4 5 6 7 8 9 10	11 12	
Title of Lesson	Principles, forms and purp and as learning	oses of a	assessment f		esson 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 teaching and learning process especially for students with diverse needs.						
Previous student teacher knowledge, prior learning (assumed) Possible barriers to learning in	Student teachers have ob supported teaching in s assessment. Misconceptions about ass	chools.					
the lesson Lesson Delivery – chosen to support student teachers in achieving the outcomes Lesson Delivery – main mode	face [v] I I	Work- Based Leaning	Seminar s [√]	Independer Study	opportunities	Practicum	
of delivery chosen to support student teachers in achieving the learning outcomes.	Seminar: Student teacher on factors that influence of Practical activity: Student various assessment compo Demonstrate knowledge a	s work or curriculur s are ask onents.	ntopics eithe n developm ed to study	er individually ent in Ghana the B4-B6 cur	y or in groups for pi	resentations fy the	
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	(NTECF; NTS 3k, 3l, 3m, 3)						
Learning Outcome for the lesson, picked and developed from the course specification Learning indicators for each learning outcome	Learning Outcomes	c t iii a v		Identify which cutting issues transferable s inclusivity, eq addressing div will these be a developed?	– core and kills, uity and versity. How		
	CLO 2. demonstrate knowledge, understanding and use of assessment for learning/of learning and as learning through projects (NTECF; NTS 3k, 3l, 3m, 3p).	forms of assessment Assessment of Learnin (AoL), Assessment as Learning (AaL), Asses for Learning (AfL);			information o be discussed. Personal deve Through semi discussions. Equity and in application of to design asse various prima with diverse le Critical thinkir	tions and y: Surfing or relevant n themes to clopment: nar clusivity: principles issment for ry pupils earners ng: create	

Topic Title: Principles and purposes of assessment	Sub-topic	Stage/time	Teaching and learning activi depending on the delivery r collaborative group work or	node selected. Teacher-led
			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	 Face-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	Practical activity Student teachers Work in their groups to examine purpose of assessment Groups present findings to whole class
			Learning (AfL); 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 Guide them to examine	Seminar 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 provided in the upper
	Closure	10 minutes	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. Respond to questions to
	Closure	To minutes	summarise lesson through questions and answers	review lesson

Lesson assessments –	In-lesson Assessment: Peers Review of group presentation for other members to ask
evaluation of learning: of, for	questions and contribute to discussion.
and as learning within the	Component 1: Formative Assessment
lesson	Group work on examining assessment practices under AaL, AfL and AoL provided in the
	syllabus under various topics and corresponding indicators to be addressed should be
	presented and scored to count towards grading in the 5 th week. CLO 2
	NTS
	k) Integrates a variety of assessment modes into teaching to support learning.
	I) 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>)
instructional 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). <i>Questioning: Professional</i>
	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)
	Primary school Curriculum and syllabuses
Required Text (core)	Asamoah-Gyimah, K., &Anane, E. (n.d.). Assessment in basic schools. Cape Coast. Institute
Required Text (core)	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 Deading List	
Additional Reading List	Alonge, M. F. (2004). <i>Measurement and evaluation in education and psychology</i> (2nd ed.).
	Ado-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). <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.
	The Pre-tertiary Curriculumand its assessment components.

Year of B.Ed. 2	Semester	1 Plac	e of less	on in seme	ester 12	B 4 5 6 7 8	9 10	11 12
Title of Lesson	Types of assessm	nent			Lesson	Duration	3 Ho	urs
Lesson description	level expectation enable them ide	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.						
Previous student teacher knowledge, prior learning (assumed)	Student teacher assessment. Mor them to the prim	reover, they ha	ad the opp	ortunity of	embarking on	STS activiti		
Possible barriers to learning in the lesson	Students have no	ot prepared tes	t items bef	ore.				
Lesson Delivery – chosen to support student teachers in achieving the outcomes	Face-to-face [√]	Practical Activity [√]	Work- Based Leaning	Seminars [√]	Independent Study [√]	e-learnir opportur [√]	-	Practicum
mode of delivery chosen to support student teachers in achieving the learning outcomes.	 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 of assessment. 							to identify
 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 kno benchmarks for l	-				nt and asse	ssmen	t
 Learning Outcome for the lesson, picked and developed from the course specification Learning indicators 	Learning Outcon	nes	Learning I	ndicators		transfer inclusivi addressi	ssues - able sk ty, equ ng div e be a	- core and tills,
Learning indicators for each learning outcome	CLO 3. demonstr knowledge and understanding of assessment and level expectation assessment benc basic schools in C 3g, 3k, 3l, 3p; NT	f types of the grade is and chmarks for Ghana (NTS	 and su Exami diagno based standa Discus 	immative as ne the chara ostic assessr assessment ards-based a s the merits	acteristics of nent; school- ; and	Commun through presenta Digital li the inter informa be discu	nicatio group ations teracy rnet fo tion or ssed. I 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. Teacher work or independent.	
			Teacher Activity	Student Activity
	Introduction to types of assessment. Formative assessment	40 minutes 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 scoring in week five e-learning opportunities: Guides students to use mobile 	 Provide relevant answersto questions posed. Present last week's assignment and revise for submission in week 5 for scoring e-learning opportunities: Student teachers use
	assessment and types of formative assessment		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	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	10 minutes	Guides student teachers to go	Go through primary			
	expectations		through the primary curriculum	curriculum to identify and			
	for upper		identify and share the grade	share grade expectations			
	primary pupils and national		expectations for upper primary	for upper primary learners and national			
			pupils and national assessment benchmarks	assessment benchmarks			
	assessment benchmarks		Denchmarks	assessment benchmarks			
	Strengths and	15	Put student teachers into pairs or	Work in pairs or smaller			
	challenges of	minutes	smaller groups to start working on	groups on Strengths and			
	the use of	minutes	Strengths and challenges of the use	challenges of the use of			
	standards		of standards based curriculum in	standards based			
	based		Ghana and how they can be	curriculum in Ghana and			
	curriculum in		addressed.	how they can be			
	Ghana and		Let them share preliminary ideas and	addressed. Share			
	how they can		present full details in next lesson	preliminary ideas and			
	be addressed		F	present full details in next			
				lesson			
	Closure	5 minutes	Review key points through questions	Provide responses for			
			and answers	review of key point in the			
				lesson.			
Lesson assessments –	In-lesson Assess	ment:Groupp	resentationon various tasks assigned du	ring the lesson. CLO 3			
evaluation of learning:							
of, for and as learning	-	NTS					
within the lesson			sment modes into teaching to support le	earning.			
			constructive feedback.	<i>c</i> .			
			earners' difficulties or misconceptions, re	eterring			
			de the competency of the teacher.	ioss cloarly to			
	parents and lear		f every learner and communicates progr				
	1 '		national and school learning outcomes	of learners			
			erencing to assess learners.				
Instructional Resources			Resources (<u>www.tessafrica.net</u>)				
		les <u>(www.t-tel</u>					
			sources (<u>www.Tess-india.net</u> ,				
	www.oerafr	ica.org,www.f	utureLearn.com, <u>www.telmooc.org</u> , <u>ww</u>	w.col.org, Khan academy)			
	The iBox (CE	NDLOS)					
	 YouTube 						
		-	ication and Learning (2016). Group work	: Professional development			
			nistry of Education (www.t-tel.org).				
		-	ication and Learning (2016). Questioning	: Professional development			
		tors. Accra. Mi					
		www.t-tel.org)					
			sources (<u>www.Tess-india.net</u> ,				
	www.oerafr	ica.org,www.t	utureLearn.com, <u>www.telmooc.org</u> , <u>ww</u>	<u>w.col.org, Khan</u> academy)			
Required Text (core)	• Asamoah Guima	h K & Anano	, E. (n.d.). Assessment in basic schools. Ca	and Coast Institute of			
Required Text (core)	Education.	n, ĸ., œAnane,	, L. (II.u.). Assessment in busic schools. Ca	ape coast. Institute of			
		m. P. K. (2008)	. Basics in measurement, evaluation and	statistics in education.			
	Cape Coast: Yaci						
	· ·		., & Atta, E. T. (2005). Principles and met	hods of teaching. Accra:			
	Black Mask Ltd			, ,			
Additional Reading List			ment and evaluation in education and p	sychology (2nd ed.). Ado-			
	Ekiti: Adedogo P						
			cal testing (6th ed.). New York: Macmilla				
			nent and evaluation in education. Kumas				
			ucational research: Quantitative, qualita	tive, and mixed approaches.			
	New York: Sage		and avaluating school lograing Baston	Allyn Pacon			
	Carey, L. IVI. (200	11). Ivieusuring	and evaluating school learning. Boston:	Allyli Baculi.			

	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 Pre-tertiary curriculum Curriculumand its assessment components.

Year of B.Ed.	2 Semest	ter 1	Place of I	esson in ser	mester 12	3 4 5 6 7 8 9 1	10 11 12
Title of Lesson	Taxonomies and Krathwo		al objectives (F	Revised version	ו by Anderson	Lesson Duration	3 Hours
Lesson description	appropriate learning plan objectives in	learning objents. It is plann n their learni	ectives and ounded to assist ing plans to	utcomes in re student teach enable them	understanding a lation to the va ers to apprecia provide or dev Ilum during STS	arious domains te criteria in w	of learning in vriting learning
Previous student teacher knowledge, prior learning (assumed)			e opportunity and lesson pl		g on STS activi	ties which exp	osed them to
Possible barriers to learning in the lesso		ve not prepare	ed lesson plan	before			
Lesson Delivery – chosen to support student teachers in achieving the outcomes	Face-to- face [\vee]	Practical Activity [√]	Work- Based Leaning	Seminars []	Independent Study [v] should be used	e-learning opportunities []	
	of concept of le to Independent and make pr ng Practical Act	earning outcor t study: stude esentations o :ivity: Group p	mes and types ent teachers en n cognitive, a	of objectives ngage with rel ffective and ps		priate curriculu ains.	ım to identify
expanded version of t description. • Write in f	at NTS 3k, 3l, 3 ne rs es ne		ng and use of	comprehensiv	e and appropria	te learning obje	ctives (NTECF;
 Learning Outcome for the lesson, picked and developed from the course specification Learning 		tcomes	Le	arning Indicat	ors	transferable inclusivity, e addressing o	es – core and e skills, equity and diversity. How e addressed or
indicators for each learning outcome	comprehens learning obje in relation to of learning ir	ng and use of ive and appro ectives and ou o the various o	• • • • • • • • • • • • • • • • • • •	setting learr Formulate a learning obj	ectives and nder the various learning in	Communica through gro presentation Personal de	tion skills: up ns velopment: out different

Topic Title: Taxonomies of educational objectives	Sub-topic	Stage/time	Teaching and learning activities to depending on the delivery modes collaborative group work or indep Teacher Activity	selected. Teacher-led
	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	Face-to-Face: Student teachers participate in lesson and use their STS experience to answer questions Students participate in
	Types of Domains (cognitive, affective and psychomotor)	60 minutes	ability and discusses the types of objectives 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	groups and share their STS experiences. 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

1	In Jacon Account of Communication of accienced tasks during Jacons CLO 4
Lesson assessments – evaluation of	In-lesson Assessment: Grouppresentation of assigned tasks during lessons CLO 4
	Component 1. Continuous 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). Principles and methods of teaching. 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). 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	The Upper Primmary Curriculum

Year of B.Ed. 2 S	emester 1	Place of les	son in sen	nester 12	234 5 6789	9 10 11 12
Title of Lesson	Stages in classroom testing I Lesson Duration 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 teacher knowledge, prior learning (assumed) Possible barriers to learning	Student teachers had to primary school cu Students may have p	rriculum and e	kercises set b	by teachers.		-
in the lesson Lesson Delivery – chosen to support student teachers in achieving the outcomes	Face- to-facePractical Activity [↓]			Independent Study[√]	e-learning opportunities []	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 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 NTS addressed 	Demonstrate understanding and use of the various principles used in constructing test items and how to score/grade test. (NTECF; NTS 3f, 3l).					
 the NTS addressed Learning Outcome for the lesson, picked and developed from the course specification Learning indicators for each learning outcome 	Learning Outcomes CLO 5. demonstrate understanding and development for designing a table of specification, constructing test items for a selected topic, and a scoring guide (NTECF; NTS 3f, 3l).	 developi formats Develop formats upper pr during S⁻ 	uidelines for ng various it various item for assessing imary learne	em group Perso about grest gtest learni Critica	fy which cross of and transferat ivity, equity and ity. How will th ssed or develop nunication skills presentations nal developmen different doma ect and diversity tives and outco he various dom ng in learning p al thinking deve em writing.	ble skills, d addressing ese be bed? :: through ht: Learning hins. :: Learning mes in line hains of lans.

Topic Title:	Sub tonic	Store /time	Teaching and learning activ	
Item Format	Sub-topic	Stage/time	collaborative group work o	mode selected. Teacher-led 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	blank, short answers) 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

[1	1	1		
			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			
			summarise lesson			
Lesson assessments –			_	the course of the lesson. CLO 5		
evaluation of learning: of,		-	f portfolio to be scored			
for and as learning within	Work in pairs to Develop 10 objective test items (with all types) and 3 essay types items with their scoring guides (marking schemes).					
the lesson	with their scorin	ig guides (mari	king schemes).			
	NTS 3					
		ariety of asses	sment modes into teaching to	o support learning.		
			constructive feedback.	5		
			earners' difficulties or miscon	ceptions, referring		
			de the competency of the tea	-		
			f every learner and communi			
	parents and lear					
	o) Demonstrate	s awareness of	national and school learning	outcomes of learners.		
	p) Uses objectiv	e criterion refe	erencing to assess learners.			
Instructional Resources	TESSA Onlin	ne Educational	Resources (<u>www.tessafrica.n</u>	<u>et</u>)		
	T-TEL Modu	ıles (<u>www.t-tel</u>	.org).			
	Other Relev	ant Online Res	sources (<u>www.Tess-india.net</u> ,			
	www.oeraf	rica.org,www.f	utureLearn.com, <u>www.telmo</u>	oc.org, <u>www.col.org, Khan</u>		
	academy)					
	The iBox (Cl	ENDLOS)				
	 YouTube 					
			ication and Learning (2016). (
			ors. Accra. Ministry of Educat			
		-	ication and Learning (2016). (Questioning: Professional		
			ors. Accra. Ministry of			
		www.t-tel.org)				
			sources (<u>www.Tess-india.net</u> ,			
		rica.org,www.f	utureLearn.com, <u>www.telmo</u>	oc.org, <u>www.col.org, Khan</u>		
	academy)					
Required Text (core)	• Asamoah-Gvima	ah K & Anana	F (nd) Assessment in basis	<i>c schools</i> . Cape Coast. Institute		
nequirea fent (core)	of Education.			sensors. cape coast. institute		
		m, P, K. (2008)	. Basics in measurement, eva	luation and statistics in		
	education. Cape					
			., & Atta, E. T. (2005). Principl	es and methods of teachina.		
	Accra: Black Ma					
Additional Reading List			ment and evaluation in educe	ation and psychology (2nd ed.).		
•	Ado-Ekiti: Adedo					

	 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). <i>Educational research: Quantitative, qualitative, and mixed approaches</i>. New York: Sage Publication. Carey, L. M. (2001). <i>Measuring and evaluating school learning</i>. Boston: Allyn Bacon. Gronlund, E. (2003). <i>Assessment of students' achievement</i>. (7th ed.). Boston: McGrawHill. Nitko, A. J. (2001). <i>Educational assessment of students</i> (3rd ed.). New Jersey: Prentice-Hall. Onivehu, A. O. & Amoah, S. A. (2002). <i>Essentials of measurement and evaluation</i>. Accra: K.
	'N' B. Publishers.
CPD needs	Item construction

Year of B.Ed. 2	Semes	ter 1	Place of	lesson in s	emester 12	2 3 4 5 6 7 8 9	10 11 12	
Title of Lesson	Stages in	classroom tes	sting 2		Less	son Duration	3 Hours	
Lesson description	principles to design items for that word	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 knowledge, prior learning (assumed)	primary so	chool curricul	um and exer	cises set by te			posed them to	
Possible barriers to learning in the lesson	Students	may have pho	obia for tests	and exams fro	m their previous	s experiences.		
Lesson Delivery – chosen to support student teachers in achieving the outcomes	Face-to- face [√]	Practical Activity [√]	Work- Based Leaning	Seminars []	Independent Study [√]	e-learning opportunities []	Practicum	
mode of delivery chosen to support student teachers in achieving the learning outcomes. • Overarching outcome, what you want the student	Independ identify a Practical A education demonstr how to sc	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 how to score/grade test. (NTECF; NTS 3f, 3l).						
 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 for the lesson, picked and developed from the course specification Learning indicators 	Learning	Outcomes		Learning Indic	ators	Identify which issues – core a transferable sl equity and add diversity. How addressed or o	nd kills, inclusivity, dressing vill these be	
for each learning outcome	understar for design specificat items for	monstrate Inding and dev Ing a table of ion, construct a selected top Inde (NTECF; I	relopment ting test pic, and a NTS 3f,	 developin formats Develop v formats for upper prin during STS Construct 	idelines for g various item arious item or assessing mary learners 5 , administer ng test items	Communicatio	on skills: o presentations lopment: t different iversity: ctives and ne with the ns of learning ns. Ig developed	

Sub-tonic	Stage/time		es to achieve outcomes depending			
Sub-topic		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) Guide them to present	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	Introduction30 minutesIntroduction30 minutesType of tests: Essay-type tests40 minutesSay-type tests30 minutes30 minutes30 minutes20 minutes20 minutesAdministering and scoring40 minutes	Sub-topicStage/timeon the delivery mode selected work or independent.Introduction30 minutesFace-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.Type of tests: Essay-type tests40 minutesFace-to-face & practical activity Leads discussion on essay-type tests and guidelines for constructing them(PD theme 2, 3, 4).30 minutesPractical activity under each of the types using the guide lines. Select topic from subjects in the upper primary Let them exchange for peer assessment and comments20 minutesFace-to-face and 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 commentsAdministering and scoring the test40 minutesFace-to-face Lead discussion on strength and weaknesses of essay type testsAdministering and scoring the test40 minutesFace-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 wassessenet should be 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 using pyramid discussion:<			

			large groups formed from the pyramid should present work done	
	Conclusion	20 minutes	Give project to be presented the following week. Let students work in pairs to create 5 items under each type Review key concepts and summarise lesson	Work on project in pairs to be presented the following week. Let students work in pairs to create 5 items under each type Respond to questions to review lesson
Lesson assessments –	In-lesson Asses	sment:Group r	presentation tasks assigned in th	e course of the lesson CLO 5
evaluation of learning: of, for and as learning within the lesson	 Tasks on objectives and essay test items constructed and peer assessed will be part of portfolio to be assess. Topic treated will be part of quiz in week 9. 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			erencing to assess learners.	
	 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). <i>Group work: Professional development</i> <i>guide for tutors</i>. Accra. Ministry of Education (www.t-tel.org). Transforming Teacher Education and Learning (2016). <i>Questioning: Professional development</i> <i>guide for tutors</i>. Accra. Ministry of Education (<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) 			
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). <i>Basics in measurement, evaluation and statistics in education</i> . 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 List	 Black Mask Etd 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. 			

Year of B.Ed. 2	Semester	1	Place of l	esson in se	emester	12 3	456 7 89	10 11 12
Title of Lesson	Planning class of Tests	room tests ar	nd assessme	ent: Characte		esson D	ouration	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 teacher knowledge, prior learning (assumed)	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.							
Possible barriers to learning in the lesson	Student may r	lot understar	id the how i	to determine	e the reliabi	lity and	l validity of te	est items.
Lesson Delivery – chosen to support student teachers in achieving the outcomes	Face-to- face [√]	Practical Activity [√]	Work- Based Leaning	Seminars []	Independe Study [V		-learning pportunities]	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 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. 							
 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 t consideration procedures (N	the diverse g	roup of lear	mers and the				
 Learning Outcome for the lesson, picked and developed from the course specification Learning indicators for each learning 	Learning Outc	omes	Lear	ning Indicat	ors		Identify whi cutting issue and transfer inclusivity, e addressing o How will the addressed o developed?	es – core rable skills, equity and diversity. ese be or
outcome	CLO 6. Demon understanding process in asso into considera group of learn reliability and assessment pr (NTECF; NTS 3 o, p).	g of the plann essment takin tion the dive ers and the validity of ocedures	ng • rse	Explain the reliability an Examine the improve and reliability an tests Apply basic estimating r	d validity factors tha finfluence d validity o methods fo	f	Communica through gro presentatio Personal de individual a presentatio Respect and construct te learners wit	ition skills: oup ns velopment: nd group ns d diversity: est to assess

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 achieve outcomes depending on the delivery mode selected. Teacher-led collaborative group work or independent. characteristics Critical thinking: developing test items for learner with different characteristics
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 lessonExchange last week's assignment amongst yourself and mark.
		20 minutes	Face-to-face and e-learningFace-to-face and e-Uses lecturette to introduce topic.learningGuides student teachers to use theirParticipate in discussionphones in searching for the meaningand use phones inof reliability and validity. Let themsearching for theshare their findingsmeaning of reliabilityand validity. Share yourfindings
		30 minutes	Practical activity & independent learningPractical activity & independent learningGuides 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 learningFace-to-face and independent learningUse 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 appliedFace-to-face and independent learningFace-to-face and independent learningExamines cases provided to explain illustrate and stimulate discussions on how methods are applied
		30 minutes	 Practical activity Guides student teachers to thinkpair 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 their experiences from STS. Select pairs at random for them to share their findings and make inputs to enrich discuss.

		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 illustrationsProvide response to questions posed during review and summary of	
Lesson assessments – evaluation of learning: of, for and as learning within the lesson			sson tasks on item analysis. CLO 6 ed as part of a quiz in week 9.	lessons.	
	 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). <i>Group work: Professional</i> <i>development guide for tutors</i>. Accra. Ministry of Education (www.t-tel.org). Transforming Teacher Education and Learning (2016). <i>Questioning: Professional</i> <i>development guide for tutors</i>. Accra. Ministry of Education (<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) 				
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). <i>Basics in measurement, evaluation and statistics in education</i> . 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 List	Ado-Ekiti: Adedo Anastasi, A. (198 Archer, F. K. (200 Burke, J. & Larry, <i>approaches</i> . New Carey, L. M. (200 Gronlund, E. (200 Nitko, A. J. (2001	go Pub. Co. 2). <i>Psycholo</i> 2). Measur C. (2008). V York: Sage 1). <i>Measur</i> 03). <i>Assessr</i>). <i>Education</i>	ogical testing (6th ed.). New York: Macm rement and evaluation in education. Kun Educational research: Quantitative, qual	nillan Publishing Inc. nasi: Paks. <i>litative, and mixed</i> on: Allyn Bacon. . Boston: McGrawHill. w Jersey: Prentice-Hall.	

CPD needs	Determining reliability and validity of test items

Year of B.Ed. 2	Semester 1	Place of	lesson in s	emester	12 3 4 5 6 7	89101112			
Title of Lesson	Planning classroom to Test Results	ests and as	Le	sson Iration	3 Hours				
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)	administration and so	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.							
Possible barriers to learning in the lesson	Student may not hav	e the skills	in analysing t	est items.					
Lesson Delivery – chosen to support student teachers in achieving the outcomes	Face-Practicalto-faceActivity[↓][↓]	to-face Activity Based [] t Study [v]				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 the NTS addressed 	 Face-to-face: Discussion, lecturette, think, pair share should be used in facilitating less on various inclusive settings in the classroom. Independent study:student teachers engage with relevant and appropriate curriculun 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 assessme 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 CLO 6. Demonstrate f understanding of the planning process in assessment taking int consideration the diverse group of learners and analysin test scores for inform decision making(NTE NTS 3f, 3g, k, l, n, m,	che • co • ged CF;	ning Indicator Explain the co analysis Discuss the be analysing iten scores Analyse both essay test iter	ncept item enefits of is in test objective and	issues – cc transferat inclusivity addressin will these developed Communi through g presentat Personal c individual presentat Respect a construct	ble skills, , equity and g diversity. How be addressed or d? cation skills: roup ions development: and group ions nd diversity: test to assess vith different			
	p).	.,			Critical th developin	inking: g test items for ith different			

Topic Title: Planning classroom tests and assessment: Analysing test	Sub-topic	Stage/time	collaborative group work or independent.				
results			Teacher Activity	Student Activity			
	Introducti on	20 minutes	Review student teachers RPK through questions. Link responses to topic to be treated	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 test analysis/item alaysis. Lets them share their findings	Face-to-face and e- learning Participate in discussion and use phones in searching for the meaning and Share your findings			
		20 minutes	Practical activity & independent learning Guides student teachers to think-pair and share their views on benefits of test analysis.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 benefits. Selected pairs share their findings			
		25 minutes	Face-to-face and independent learning	Face-to-face and independent learning			
			Use lecturette to introduce and explain the basic steps in doing test analysis. Use case studies and practical illustrations to stimulate discussions on how methods are applied	Examines cases provided to explain illustrate and stimulate discussions on how test analysis can be done			
		25 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 			
		40 minutes	Face-to-face and independent learningUse lecturette to introduce and explain how to determine discrimination index using: $DI = RU - RL$ NU NLRL NUWhere:RU 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 who answered the test correctly.NU= number of pupils in the upper group	Face-to-face and independent learning Participate in discussing The discrimination index is computed using practical illustrations			

	1					
			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		
Lesson assessments –			esson group presentation on reliabi			
evaluation of learning: of,			ng classroom tests and assessment	should be part of the general		
for and as learning within	portfolio and gra	aded as pa	art of assessment component 2			
the lesson						
	Topic treated w	ill be asses	ssed as part of a quiz in week 9.			
	NTS 3			and the second second		
		-	ssessment modes into teaching to s	upport learning.		
	I) Listens to learners and gives constructive feedback.					
	m) Identifies and	d remedia	tes learners' difficulties or misconce			
	m) Identifies and learners whose	d remedia needs lie o	tes learners' difficulties or misconce butside the competency of the teach	er.		
	m) Identifies and learners whose n) Keeps meanir	d remedia needs lie o ngful recor	tes learners' difficulties or misconce	er.		
	m) Identifies and learners whose n) Keeps meanir parents and lear	d remedia needs lie o ngful recor rners.	tes learners' difficulties or misconce butside the competency of the teach ds of every learner and communica	er. tes progress clearly to		
	 m) Identifies and learners whose n) Keeps meaning parents and learners o) Demonstrate 	d remedia needs lie o ngful recor rners. s awarene	tes learners' difficulties or misconce butside the competency of the teach rds of every learner and communica ss of national and school learning ou	er. tes progress clearly to		
Instructional Resources	 m) Identifies and learners whose n) Keeps meaning parents and lear o) Demonstrate p) Uses objective 	d remedia needs lie c ngful recor rners. s awarene <u>e criterion</u>	tes learners' difficulties or misconce butside the competency of the teach ds of every learner and communica ss of national and school learning or referencing to assess learners.	er. tes progress clearly to utcomes of learners.		
Instructional Resources	 m) Identifies and learners whose n) Keeps meaning parents and lean o) Demonstrate p) Uses objectiv TESSA Onlin 	d remedia needs lie c ngful recor rners. s awarene e criterion ne Educatio	tes learners' difficulties or misconce butside the competency of the teach rds of every learner and communica ss of national and school learning ou referencing to assess learners. onal Resources (<u>www.tessafrica.net</u>	er. tes progress clearly to utcomes of learners.		
Instructional Resources	 m) Identifies and learners whose n) Keeps meaning parents and learners o) Demonstrate p) Uses objectiv TESSA Onling T-TEL Modu 	d remedia needs lie c ngful recor rners. s awarene <u>e criterion</u> ne Educatio ules (<u>www.</u>	tes learners' difficulties or misconce butside the competency of the teach rds of every learner and communica ss of national and school learning ou referencing to assess learners. onal Resources (<u>www.tessafrica.net</u> <u>.t-tel.org</u>).	er. tes progress clearly to utcomes of learners.		
Instructional Resources	 m) Identifies and learners whose n) Keeps meaning parents and lear o) Demonstrate p) Uses objectiv TESSA Onling T-TEL Modu Other Relevance 	d remedia needs lie c ngful recor rners. s awarene e criterion ne Educatio ules (<u>www.</u> vant Online	tes learners' difficulties or misconce butside the competency of the teach 'ds of every learner and communica ss of national and school learning ou referencing to assess learners. onal Resources (<u>www.tessafrica.net</u> <u>t-tel.org</u>). e Resources (<u>www.Tess-india.net</u> ,	er. tes progress clearly to utcomes of learners.		
Instructional Resources	 m) Identifies and learners whose n) Keeps meaning parents and learners o) Demonstrate p) Uses objectiv TESSA Onling T-TEL Modu Other Relevent www.oeraft 	d remedia needs lie c ngful recor rners. s awarene e criterion ne Educatio ules (<u>www.</u> vant Online	tes learners' difficulties or misconce butside the competency of the teach rds of every learner and communica ss of national and school learning ou referencing to assess learners. onal Resources (<u>www.tessafrica.net</u> <u>.t-tel.org</u>).	er. tes progress clearly to utcomes of learners.		
Instructional Resources	 m) Identifies and learners whose n) Keeps meaning parents and lear o) Demonstrate p) Uses objective TESSA Online T-TEL Modu Other Releve www.oerafing academy) 	d remedia needs lie c ngful recor rners. s awarene <u>e criterion</u> ne Educatio ules (<u>www.</u> vant Online rica.org, w	tes learners' difficulties or misconce butside the competency of the teach 'ds of every learner and communica ss of national and school learning ou referencing to assess learners. onal Resources (<u>www.tessafrica.net</u> <u>t-tel.org</u>). e Resources (<u>www.Tess-india.net</u> ,	er. tes progress clearly to utcomes of learners.		
Instructional Resources	 m) Identifies and learners whose n) Keeps meaning parents and lear o) Demonstrate p) Uses objective TESSA Online T-TEL Modu Other Releven www.oerafinacademy) The iBox (Clipping) 	d remedia needs lie c ngful recor rners. s awarene <u>e criterion</u> ne Educatio ules (<u>www.</u> vant Online rica.org, w	tes learners' difficulties or misconce butside the competency of the teach 'ds of every learner and communica ss of national and school learning ou referencing to assess learners. onal Resources (<u>www.tessafrica.net</u> <u>t-tel.org</u>). e Resources (<u>www.Tess-india.net</u> ,	er. tes progress clearly to utcomes of learners.		
Instructional Resources	 m) Identifies and learners whose n) Keeps meaning parents and learners o) Demonstrate p) Uses objective TESSA Online T-TEL Modu Other Relevent www.oeraftacademy) The iBox (Cline) YouTube 	d remedia needs lie o ngful recor rners. s awarene <u>e criterion</u> ne Educatio ules (<u>www.</u> vant Online rica.org,w	tes learners' difficulties or misconce butside the competency of the teach rds of every learner and communica ss of national and school learning ou referencing to assess learners. onal Resources (<u>www.tessafrica.net</u> <u>t-tel.org</u>). e Resources (<u>www.Tess-india.net</u> , <u>ww.futureLearn.com</u> , <u>www.telmooc</u>	er. tes progress clearly to utcomes of learners.		
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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). <i>Principles and methods of teaching</i> . Accra: Black Mask Ltd
Additional Reading List	Alonge, M. F. (2004). <i>Measurement and evaluation in education and psychology</i> (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). <i>Educational assessment of students</i> (3rd ed.). New Jersey: Prentice-Hall.
	Onivehu, A. O. & Amoah, S. A. (2002). <i>Essentials of measurement and evaluation</i> . Accra: K.
	'N' B. Publishers.
CPD needs	Determining reliability and validity of test items

		_	
Year	of	в.	Ed

Semester

2

1

Place of lesson in semester

123456789101112

Title of Lesson	Assessment procedures	for inclusive classroo		sson Duration	3 Hours				
Lesson description Previous student teacher	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.								
knowledge, prior learning (assumed)		lowledge about acti	evement test.						
Possible barriers to learning in the lesson	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 [V I B	Vork- Seminars ased [√] eaning	Independent Study [√]	e-learning opportunities []	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 the NTS addressed 	Face-to-face: Concept m authentic or performanc Seminar:Studentspartici Independent study:stud and discusses the proced Practical Activity:Group assessment tasks for incl Demonstrate the unders inclusive and multi-grade	te assessment. pate in a seminar se ent teachers engage dures for planning in presentations of ho <u>lusive and multi-grad</u> tranding of assessing	ssion with relevant a clusive classroo w to plan and de de classrooms performance a	nd appropriate c m tests and asses evelop authentic, nd related assign	urriculum ssments. /performance				
 Learning Outcome for the lesson, picked and developed from the course specification Learning indicators for each learning outcome 	Learning Outcomes Learning Outcomes 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;		formance nd discuss the s of the types performance asks. elop formance asks for	Identify which issues – core a transferable sk inclusivity, equ addressing div will these be a developed? Communicatio through group presentations Personal devel Learning about assessment Respect and di Understanding inclusive classes settings.	nd kills, hity and ersity. How ddressed or n skills: opment: t planning versity: t 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)	Face-to-face 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-	Practical Activity: Students participate in groups.			
Lesson assessments –	In-lesson Assess	ment: Group p	grades. resentation and seminar part	l 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. I) 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 Onlin T-TEL Modu Other Relev 	e Educational F les (<u>www.t-tel.</u> ant Online Reso rica.org,www.fu	Resources (<u>www.tessafrica.ne</u>	_			

	 YouTube Transforming Teacher Education and Learning (2016). <i>Group work: Professional development guide for tutors</i>. Accra. Ministry of Education (www.t-tel.org). Transforming Teacher Education and Learning (2016). <i>Questioning: Professional development guide for tutors</i>. Accra. Ministry of Education (www.t-tel.org).
	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)
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). <i>Basics in measurement, evaluation and statistics in</i> <i>education</i> . 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
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CPD needs	Workshop on item analysis

Year of B.Ed. 2	Semester	1	Place of	lesson in s	emester 1	2345678	9 10 11 12
Title of Lesson	Assessment pro	cedures for	r inclusive	classrooms	Lesson Dur	ation	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						
Previous student teacher knowledge, prior learning (assumed)	Student teacher performance as:	sessment.	_				
Possible barriers to learning in the lesson	Students may no	ot be famili	iar with the	e various incl	lusive settings ii	n the classrooi	m.
Lesson Delivery – chosen to support student teachers in achieving the outcomes	Face-to-face [√]	Practical Activity [√]	Work- Based Leaning	Seminars [√]	Independent Study [√]	e-learning opportunitie []	Practicum es
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 the NTS	Face-to-face: Co rating scales Ser Independent stu discusses the pr Practical Activit assessment task Demonstrate th inclusive and mu	ninar:Stud udy:studen ocedures fo y: Group p s for inclus e understa	entspartici at teachers or planning resentation sive and mu nding of as	pate in a ser engage with g inclusive clans of how to ulti-grade cla sessing perfo	ninar session relevant and a assroom tests a plan and develo issrooms ormance and re	ppropriate cui nd assessmen op authentic/p	rriculum and ts. performance
for the lesson, picked and developed from the course specification • Learning indicators	Learning Outcom		Learning			transferable inclusivity, o addressing will these b developed?	es – core and e skills, equity and diversity. How e addressed or
for each learning outcome	CLO 7. demonst understanding, and developing authentic/ perfor assessment task considering gen- learners with div strengths in incl multi-grade clas (NTECF; NTS 3k,	olanning rmance s, der and verse usive and srooms	 asset discuthe t auth asset Plan auth asset 	assment and uss the chara ypes of entic/perform ssment tasks and develop entic/perform	mance , mance , for inclusive		oup ins evelopment: iout planning d diversity: ling the usive

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)	Face-to-face 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 Tally sheets etc	Practical Activity: Students participate in groups and reflect their experiences during STS. Groups present to whole class			
Lesson assessments – evaluation of learning: of, for and as learning within the lesson	of Component 2 NTS 3 k) Integrates a l) Listens to lea m) Identifies ar learners whose n) Keeps mean parents and lea o) Demonstrate	variety of assessment modes into teaching to support learning. arners and gives constructive feedback. nd remediates learners' difficulties or misconceptions, referring e needs lie outside the competency of the teacher. ningful records of every learner and communicates progress clearly to					
Instructional Resources	T-TEL ModOther Rele	ules (<u>www.t-tel.or</u> vant Online Resou frica.org,www.fut	esources (<u>www.tessafrica.net</u> rg). urces (<u>www.Tess-india.net</u> , ureLearn.com, <u>www.telmoo</u>				

	YouTube
	 Transforming Teacher Education and Learning (2016). Group work: Professional
	development quide for tutors. Accra. Ministry of Education (www.t-tel.org).
	 Transforming Teacher Education and Learning (2016). Questioning: Professional development guide for tutors. Acres Ministry of
	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
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	approaches. New York: Sage Publication.
	Carey, L. M. (2001). Measuring and evaluating school learning. Boston: Allyn Bacon.
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	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
1	

Year of B.Ed. 2	Semester	1 PI	ace of le	sson in se	mester	12 3 4 5 6	57891() 11 12
Title of Lesson	Data presentation				Lesson Durat	ion	3 Hours	
Lesson description	This lesson aims to prepare students teachers to acquire a repertoire of knowledge and ski to enable them apply appropriate techniques, processes and procedures to gather releva data from differently abled middle childhood learners in inclusive and multi-grade setting order to support their learning.							ner relevant
Previous student teacher knowledge, prior learning (assumed) Possible barriers to	Student teachers have knowledge about characteristics of the types of authentic or performance assessment. Students may not be familiar with the various inclusive settings in the classroom.							or
learning in the lesson Lesson Delivery – chosen to support student teachers in achieving the outcomes	Face-to-face [√]	Practical Activity [√]	Work- Based Leaning	Seminars [√]	Independer Study [√]	t e-lear		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 	Demonstrate th of interpreting t		-					
 Learning Outcome for the lesson, picked and developed from the course specification Learning indicators for each learning 	Learning Outco	mes	Learn	ng Indicato	rs	cuttir trans inclus addre will th	ferable sl sivity, equ essing div	 core and kills, iity and ersity. How ddressed
outcome	CLO 8. demonst understanding a norm-reference criterion-reference of interpreting t manage data ga various aspects learners (NTS 3)	and use of ad and nced modes cests and thered on of the	a: d le D a: Si e C re re	e results to arning of div esign differe sessment fo EN in inclusive emonstrate ferenced ar ferenced m	rners with s, analyse and support verse learners entiated or learners with ve settings. e how norm- nd criterion-	Comr throu prese Perso Learn proje collec types	nunicatio gh group intations inal devel ing abou ct work ect and di	n skills: 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 – evaluation of learning: of, for and as learning within the lesson	In-lesson Assessment: Presentation of tasks assigned to students NTS 3 k) Integrates a variety of assessment modes into teaching to support learning. I) 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). <i>Group work: Professional</i> <i>development guide for tutors</i>. Accra. Ministry of Education (www.t-tel.org). Transforming Teacher Education and Learning (2016). <i>Questioning: Professional</i> <i>development guide for tutors</i>. 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
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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	Workshop on using descriptive statistics for data analysis

Year of B.Ed. 1	Semester	2	Place	of lesson in s	emester	12345678	891011 12
Title of Lesson	Data presentation and Interpretation of tests and authentic assessment data (2)Lesson Duration3 Hours					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 knowledge, prior learning (assumed)	Student teachers have knowledge about characteristics of the types of authentic or performance assessment. Students may not be familiar with the various inclusive settings in the classroom.						
Possible barriers to learning in the lesson Lesson Delivery – chosen to support student teachers in achieving the outcomes	Face-to- face [V]	Practica I Activity	Work- Based Leaning	Seminars	Independe	en e-learning /] opportuniti s	Practicum
Lesson Delivery – main mode of delivery chosen to support student teachers in achieving the learning outcomes.	[V] [] 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 	Demonstrate the 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).						
 Learning Outcome for the lesson, picked and developed from the course specification Learning indicators for each learning outcome 	Learning Outcomes Learning		ing Indicator	ators Identify which cross issues – core and transferable skills, inclusivity, equity an addressing diversity. will these be address developed?		re and e skills, equity and diversity. How e addressed or	
	of norm-re and criterio referenced interpretin manage da on various	ding and us ferenced on-	e a: d u le D a: S v E re re	collect data c spects of lea ifferent tools se results to arning of div esign differe ssessment fo EN in inclusiv Demonstrate eferenced an eferenced mo terpreting to	rners with s, analyse an support verse learner or learners w ve settings. how norm- nd criterion- odes of	Communica through gro presentatio Personal de rs. Learning ab project wor vith Respect and collecting d types of lea	ation skills: oup evelopment: oout assessing rk d diversity: lata on various

Topic Title:			Teaching and learning activities to achieve outcomes			
Data presentation and Interpretation of tests and	Sub-topic	Stage/ time	depending on the delivery mode selected. Teacher-led collaborative group work or independent.			
authentic assessment data			Teacher Activity	Student Activity		
	Introduction	20	Face-to-face	Face-to-face		
	introduction	minutes	Reviews RPK using	Provide relevant answers to		
			questions and answers on	questions posed and		
			assessing project work	applying the knowledge		
			and portfolio (PD theme	gained during previous		
			2)	class practical activities		
	Types of feedback	60	Face-to-face:	Face-to-face:		
		minutes	Tutor uses concept mapping/cartooning	Student teachers participate in lesson and		
			discuss types of feedback	use their previous class		
			obtained from	practical activities to		
			assessment	answer questions.		
	How to use	60	Seminar:	Seminar:		
	feedback	minutes	Tutor invites two other	Student teachers		
			tutors to serve as	participate in the sessions.		
			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.			
	Conclusion of	40	Practical Activity:	Practical Activity:		
	lesson/evaluation	minutes	Tutor assign students into	Students participate in		
			groups based on their Halls they belong to in	groups and reflect their experiences in their		
			their college.	journals.		
			They discuss all the	Joannais.		
			subtopics in the course			
			and provide a brief			
			presentation of what they			
			have learnt.			
Lesson assessments –	In-lesson Assessme	nt: Participa	ition in discussion and answe	ring of questions orally		
evaluation of learning: of, for and as learning within the lesson	Component 3: 40% Selected topic treat 1 to 7	son 1 to 12 should be part of e	end of semester exams. CLOs			
	NTS 3					
		ty of assess	ment modes into teaching to	support learning		
	I) 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> ,					
		org,www.fu	itureLearn.com, <u>www.telmoo</u>	c.org, <u>www.col.org, Khan</u>		
	academy)					
The iBox (CENDLOS)						
	 YouTube 					

CPD needs	Using assessment data
	Hall. Onivehu, A. O. &Amoah, S. A. (2002). <i>Essentials of measurement and evaluation</i> . Accra: K. 'N' B. Publishers.
	Nitko, A. J. (2001). Educational assessment of students (3rd ed.). New Jersey: Prentice-
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Denotice of Texat (secure)	academy)
	www.oerafrica.org,www.futureLearn.com, www.telmooc.org, www.col.org, Khan
	Other Relevant Online Resources (<u>www.Tess-india.net</u> ,
	• Education (<u>www.t-tel.org</u>).
	development guide for tutors. Accra. Ministry of
	• Transforming Teacher Education and Learning (2016). <i>Questioning: Professional</i>
	development guide for tutors. Accra. Ministry of Education (www.t-tel.org).
	• Transforming Teacher Education and Learning (2016). Group work: Professional