

## **Formative Assessment Practices Among Distance Education Tutors in Ghana.**

**Isaac Amoako**

Department of Education and Psychology  
University of Cape Coast, Ghana.  
isaac.amoako2@stu.ucc.edu.gh

### **Abstract**

This study examined formative assessment procedures commonly used by Distance Education tutors in Ghana during facilitation of the course model content. It investigated whether course tutors make use of multiple formative assessment methods or a single method. A descriptive survey research design was employed for the study. Census method was used in selecting the study 150 respondents (tutors'). A self-developed questionnaire was used for the data collection after it has been pilot tested and refined. The study revealed that 'observation', 'oral questioning', 'peer-assessment', 'student self-assessment' and 'tutor made test' are the current formative assessment practices of on-site course tutors of Distance Education in Ghana. It was also found that majority of the tutors made use of multiple formative assessment procedures. It was recommended that through workshops and in-service training tutors are made to sustain the use of a wide range of methods of formative assessment and not cling to a single one. Unique student characteristics warrant the use of multiple formative assessment technique.

**Keywords:** Distance Education, formative assessment procedures, facilitation.

### **1. Introduction**

As a force capable of contributing to social and economic development in many nations, distance learning (or DE i.e., Distance Education) is today, one of the most rapidly growing mode of education and training. It is fast becoming an accepted and indispensable part of the mainstream of educational

systems in both developed and developing countries, with particular importance for the latter (UNESCO, 2000). Immense attention is given to distance learning to meet the educational needs of the adult population, with a view to providing new and alternative learning opportunities for those who were initially deprived of them, or who, for one reason, or another, did not get the opportunity to be at the regular tertiary education system.

Mateo and Sangra (2007) believed that quality of learning should not be measured only in terms of student learning achievement or success but should also be related to the effectiveness of the instruction that took place in the classroom. For this reason, they argued for the development of an effective formative assessment system as a necessary feature of distance education instruction. They suggested that assessment must help to identify weakness and cause improvements in the student learning process, through a permanent feedback (p. 9). Student assessments in education are tools used to track student's performance and to ascertain whether the learning goals have been achieved. Yueming (2004) noted that formative assessment helps teachers to make important decisions about daily instruction. In addition, the assessment information assist in interpretation, monitoring of students' progress, giving constructive feedback, and improving both students' learning and teaching methods (Flanagan et al, 2009). Other studies have supported the idea that formative assessment is part of the learning cycle and adds value to students' performance (O'Farrell, 2009; Spiller, 2009).

In Ghana formative assessment is well embraced and practiced by teachers at all levels of Education (Anhwere, 2009; Asare, 2015; Amoako, 2018). The intention for the practice of formative assessment in Ghanaian schools irrespective of the level is for improvement of instruction. This means that assessment information that is generated formatively is used by teachers and students to inform subsequent teaching and learning (Harlen, 2007). The active dynamic and socially responsive nature of these assessment processes are, not only thought to align with socio-cultural principles of learning

but have also shown to be central to raising of student achievement. Assessment from this perspective is therefore said to be formative assessment or assessment for learning (Black & William, 1998).

Facilitation and learning for those pursuing various degrees by the DE method is perceived by most students as stressful unlike the regular method. Most DE students are workers during week days and only go for lecture at the weekends. Their plight calls for more effective way of instruction through assessment to drive the concept down to them for better performance and quality. This study sought to investigate DE tutors' techniques regarding formative assessment and also to ascertain whether tutors implement wide range of methods during facilitation or cling to a single method.

## **2. Statement of the Problem**

Knowledge is constructed during the learning process. A student discovering knowledge for him/herself, rather than receiving it inspires the notion of performance-based assessment in the lecture room. It is becoming more and more evident that formative assessment is an integral component of the teaching and learning process (Nolen, 2007). Bordoh, Bassaw and Eshun (2013) assert that “formative assessment is used to provide information on the likely performance of students; to describe strength or weakness and feedback given to students, telling them which items they got correct or wrong. Formative assessment enhances the efficacy of instructional strategies (p.9). Ampiah, Hart, Nkhata and Nyirenda (2003) contend that a teacher need to know what students are able to do or not if he or she is to plan effectively. This presupposes that formative assessment is quintessential for the instructor and for the learner. In Ghana, the assessment and its practices among teachers has being well researched and documented (Amoako, 2018; Bordoh et al, 2013; Akyeampong, 1997). However, research in this area focused attention on formative assessment practices among senior high school teachers and its impact on students learning (Sofu, Ocansey, Nabie & Asola, 2013), among Colleges of Education tutors and the strategies they use (Akyeampong, 1997; Bekoe, Eshun & Bordoh, 2013; Eshun, Bordoh, Bassaw

& Mensah, 2014) as well as among elementary school teachers in the country (Asare, 2015). Unfortunately, application of formative assessment techniques among DE tutors' during facilitation has not been documented. It is therefore justifiable to inquire whether DE tutors in Ghana practice formative assessment. If they do, what techniques do they use? What is their perception of the impact of formative assessment practices in the DE programs? There are no readily available answers for these questions because the focus of Ghanaian researchers regarding formative assessment has over the years not been on Distance Education but rather on basic, secondary and colleges of education. This study therefore sought to investigate the techniques used by course tutors.

### **3. Literature Review**

#### **Theoretical Perspective**

The theory that guided the study is the Constructivist theory put forward by Lev Vygotsky (1896-1935). Constructivism theory is based on the belief that humans are able to construct knowledge by understanding the information they are accessible to. Vygotsky's theory is also known as social constructivism and explains that children are socialized and developed through collaborative activity and learning that takes place through socialization and education. Vygotsky's idea is based on the fact that human learning is dependent on interactions between a learner and an expert within the learners' zone of proximal development; a zone where learners can almost, but not quite, complete a task alone. In the context of this study the expert is the tutor or facilitator. Through the support provided by more knowledgeable others (tutors), students are able to perceive, pay attention, and their memory capacities are transformed by social context, tradition, religion and language. Vygotsky believed that for knowledge to be developed, school learning must take place in meaningful context at the same time that learning in real world is taking place (Ozer, 2004).

The theory promotes active learning and collaboration among learners where discovery is aided by the tutor and among students themselves. According to the theory, learners' needs should be identified in the classroom and they should be supported and exposed to discussions, project groups, research collaborations and problem solving. Constructing and internalizing knowledge is the key essence of Vygotsky's constructivism theory (Ozer, 2004). According to the theory, tutors are expected to interact with learners and guide them by developing a variety of classroom assessment and teaching strategies, the spine of ideology on which formative assessment thrives.

### **Instructors' Procedures of Formative Assessment practices**

Black and William (2010) pointed out that 'the giving of marks and grading function are overemphasized, while the giving of useful advice and the learning function are underemphasized' (p. 84.). Teachers may find it difficult to ignore the constant need of grading their students' works instead of putting these on 'hold' and focusing on formative practices. In addition, earlier studies have stressed the power of formative assessment with feedback for supporting student achievement and motivation to be essential in the learning process. That is if it provides specific information about the work related to standards or learning progression, suggest strategies for improvement, rather than grades and social comparison (Nolen, 2011). Formative assessment and feedback would then provide the students with an opportunity to get a better understanding of the gap between their current and desired performance. Some suggestions are however, made as procedures for the implementation of formative assessment.

Educators (Black, 2010; Hedge, 2001) have presented self and peer-assessment as compliments that could be used to serve a formative function. These can be used as strategies in the classrooms to promote metacognitive thinking among students and to give them a chance to be more involved in their learning. These strategies are becoming more and more popular in schools, especially for tertiary level students. First, self-assessment provides learner autonomy, which encourages the students to monitor

and notice their own progress. This aim could also help the teachers to prepare their lessons when understanding which areas the students are struggling with and at the same time by giving the students an opportunity to choose the learning focus from their own needs (Dragemark & Oscarson, 2010). Second, peer-assessment compliment differs from self-assessment in the way that it most of the time requires to be taught. The students are usually more serious when they assess themselves (Farell, 2002).

Also, Black (2010), suggested that the heart of the formative interaction is the active involvement of students (e.g. asking of questions during teaching and demanding explanations on what the teacher already said whilst teaching) when the learner produces evidence and is used to guide further improvements. Black (2010) further pointed out that the evidence that the teachers collect to adapt their teaching to meet student needs must be consistent with established principles for effective learning. Black (2010) summarized four basic principles as the following statements:

1. Start from a learner's existing understanding.
2. Involve the learner actively in the learning process.
3. Develop the learner's understanding of the aims and criteria for effective learning.
4. Promote social learning, i.e. learning through discussion. (p. 360).

Moreover, teachers can use questionnaires to learn about students' motivation for learning, the ways in which they like to learn, the problems they have with learning and their reactions to past classroom experience as a procedure for assessing students for learning (formative purpose) (Hedge, 2001). This helps the instructor to get a holistic view of students about the entire topic of discussion.

Moreover, the concept of questioning as a technique has a long history in the area of formative assessment; however, what has changed over the course of time is a shift from close-ended questions to more informative, open-ended formats. Black, Harrison, Lee, and Marshall (2003) encourage teachers not only to develop more effective questions but also to facilitate an environment where

students must think analytically and provide their own answers to their questions. In addition, Black et al. (2003, p. 39) argue that formative questions challenge “a common misconception, to create some conflict that requires discussion” which encourages students to think of a response or an idea from different angles. To develop more formative questions, Black et al. (2003, p.42) encourage classroom teachers to organize their questions considering three themes: “frame questions” around the big idea that are worth asking; increasing the “wait time” so that students can think and express their responses; and facilitating “follow-up’ questions or activities to ensure students understand.

#### **4. Research Methods**

The study adopted a descriptive survey design. Traditionally, two prominent universities (i.e. University of Cape Coast and University of Education, Winneba) are noted to be running Distance Education programs in Ghana. However, University of Cape Coast pioneered Distance Education mode in Ghana, hence, the study focused on all the tutors’ of College of Distance Education, University of Cape Coast as the study population. There are eighty-one (81) study centers for the College across the ten (10) administrative regions of Ghana. Three regions were purposively selected out of the ten (10) regions for the study. The regions were Greater Accra, Central and Western regions. Furthermore, for a detailed study, three study centers were selected randomly to represent the three regions. In all, the accessible population of tutors were estimated to be one hundred and fifty (150). Since the accessible population was relatively small in size, Census approach was used to involve all the 150 tutors as the study respondents (Leedy & Ormrod, 2005). Table 1, gives the breakdown of the accessible population distribution that were selected to represent the three regions.

**Table 1**

Regions	Centers	Number of tutors
Greater Accra	Ebenezer SHS	50
Central	University of Cape Coast	60
Western	Holy Child College of Education	40
		150

The instrument used for data collection was a self-developed 18-item questionnaire with two sub-scales measuring formative assessment procedures and teachers' perception of the impact of those procedures on course facilitation and students learning. The first section of the questionnaire contained items that measured formative assessment methods. Tutors were asked to tick which of the method(s) they use when assessing students' formatively. For example, project work, questionnaire, student self-assessment, student peer-assessment; presentation, tutor-made-test and oral questions were the items crafted to measure methods of assessing students formatively. The second part of the questionnaire measured the impact of formative assessment methods on students' learning. The second part of the questionnaire data was not used in this study. This is because this study sought to explore the formative assessment methods commonly used by DE course tutors. The instrument was pilot tested using thirty (30) tutors from Kumasi Polytechnic Centre, Kumasi in the Ashanti region. The pilot test was necessary because it enhanced the content validity and reliability of the instrument, and to improve questions, format and scales after careful analysis of the items based on the comments passed by respondents concerning the weaknesses, clarity and ambiguity on all aspects of the questionnaire (Leedy & Ormrod, 2005). The instrument was again, given to an expert in the field of measurement and evaluation for professional scrutiny of the instrument. After, the refinement of the instrument, the administration of the instrument was done in four weeks. The administration was done by the researcher himself together



with two trained research assistants. Formal permission was secured from relevant authorities prior to the data collection exercise. Respondents were also given the assurance of confidentiality and anonymity as well as the right to opt out of the study if they wished. The data to answer the research question were analysed using descriptive statistics, specifically, frequency and percentages. At the end of the data collection, one hundred and twenty (120) questionnaires were completed and submitted. The data was cleaned and coded using SPSS version 22, for analysis and discussion.

## RESULTS

**Table 2**

Statement	More often	Often	Not often	Not Used	Total
Project Work	-----	24(20%)	32(28%)	64(52%)	120(100%)
Questionnaire	7 (6%)	18 (15%)	30 (25%)	65 (54%)	120(100%)
Student self-assessment	62 (52%)	28 (23%)	7 (9%)	23 (19%)	120(100%)
Student Peer-assessment	14 (12%)	70 (58%)	28 (23%)	8 (7%)	120(100%)
Presentation	12 (10%)	17 (14%)	60 (50%)	31 (26%)	120(100%)
Tutor Made Test (TMT)	90 (75%)	30 (25%)	-----	-----	120(100%)
Oral questions	77 (64%)	23 (19%)	14 (12%)	6 (5%)	120(100%)
Observation	45 (38%)	63 (53%)	4 (3%)	8 (7%)	120(100%)

Overall, 62 (52%) of the tutors indicated that they use students' self-assessment more often whilst 28 (23%) of the tutor use it (students' self-assessment) often. Again, majority (n=70, 58%) of the respondents showed that in the lecture room, they make use of student peer-assessment strategy 'often' whilst 14 (12%) of the tutors use it 'more often'. Overwhelming majority (n=90, 75%) of the

respondents agreed that they make use of “tutor made test” (TMT) more often whilst 30 (25%) use it ‘often’. Moreover, majority (n=77, 64%) of the respondents intimated that “oral questioning” are used in the lecture hall when they are assessing students formatively. On the same issue of the use of oral questions, 23 (19%) of the tutors use it ‘often’. Finally, majority (n=63, 53%) of the respondents reported that they use ‘observation’ as a formative assessment tool ‘often’ whereas 45 (38%) of tutors suggested that they use observation ‘more often’.

## **DISCUSSION**

From Table 2, the data suggests that College of Distance Education, University of Cape Coast tutors make use of student self-assessment, student peer-assessment, oral questioning and observation as classroom techniques when assessing students formatively. The use of the listed formative assessment methods, ‘often and more often’ by course tutors is commendable. This is because it is more likely for tutors to serve varied learning needs of students’ during facilitation when they assess them (students) ‘often’ and ‘more often’ than to think of not assessing them often or no formative assessment at all. From Table 2 demonstrates that majority of DE course tutors make use of multiple formative assessment procedures during facilitation. This implies that the tutors who utilize student self-assessment, student peer-assessment, oral questions and observation ‘often and more often’, also tend to make use of tutor made test (TMT). However, tutors (i.e. in a minority) that default on the use of student self-assessment, student peer-assessment, oral questions and observation tend to make use of a single formative assessment procedure, which is TMT. It could also be deduced from the data that techniques such as presentation, questionnaire and project work are less considered by tutors in their formative assessment practices. The findings of this study corroborates several study findings in the literature to the effect that peer and self-assessment are critical components of formative assessment. According to Black, Lee, Harrison and William (2004) students will achieve more if they are fully

engaged in their own learning process, aware of what they need to learn and why, and what they need to do to reach it. Nonetheless, Black et al. (2004) cautioned teachers that peer and self-assessment can only be meaningful in the classroom if it is used to assist students; especially low achievers. Also, Black (2010), suggested that the heart of the formative interaction is the active involvement of students (e.g. asking of questions whilst teaching and demanding explanations to what you have already said whilst teaching) when the learner produces evidence and is used to guide further improvements. In certain situations, tutors rely on observation to assess students' performances (Mintah, 2003). Some educators have reported being able to see the weakness and strength of their students' better if they make use of paper and pencil test (e.g. tutor made-test) as a formative test (Akyeampong et al. 2006). In summary, most academic tutors make use of peer-assessment, student self-assessment, oral questioning and observation as formative assessment techniques in the traditional regular classrooms (Eshun, Bordoh, Bassaw & Mensah, 2014).

## **CONCLUSION**

Evidence from the data clearly shows that the use of 'observation', 'oral questioning', 'peer-assessment', 'student self-assessment' and 'tutor made test' are the current formative assessment practices of course tutors as far as Distance Education, in Ghana is concerned. It does appear that, majority of the tutors make use of multiple formative assessment procedures such as student self-assessment, student peer-assessment, oral questions, observation and tutor made test. These course tutors are encouraged to continue with such practices since it's enure to the benefit of the students, especially, the low achievers. However, the few tutors who tend to cling to the use of a single formative assessment method (i.e. TMT) should emulate their counterpart practicing multiple formative assessments during facilitation. Data from this study have implications for in-service professional

development and tutor preparation and for this reason, critical recommendations are made for policy and practice.

## **RECOMMENDATION**

Assessment is an integral part of the instructional process. Therefore, assessment practices should clearly align with instructional goals, in line with this idea, the University of Cape Coast, College of Distance Education should as a matter of policy organize periodic in-service training for tutors to make formative assessment a core part of their facilitation. This would help sustain tutors use of multiple formative assessment methods. Again, tutors (thus those in the minority) must be encouraged and empowered through workshops and in-service training to use a wide range of formative assessment and not to cling to a single one. Unique student characteristics warrant the use of multiple formative assessment technique. Students' learning styles, for example, influence how they perform on a particular assessment technique. Finally, it is worth noting that even though all formative assessment procedures are important and effective, tutors must ensure that they rely on those techniques that are premised on the students' personal development (i.e. peer-assessment and students self-assessment).

## **REFERENCES**

- Akyeampong, K. (1997). *Continuous assessment in post-secondary teacher training in Ghana: A case study evaluation*. Unpublished Ph.D. Thesis. University of Nottingham, U.K.
- Amoako, I. (2018). A meta-analysis on formative assessment practices in Ghana. *Research on Humanities and Social Sciences*, 8(3), 2224-5766.
- Ampiah, J. G., Hart, K., Nkhata, B., & Nyirenda, D. M. C. (2003). *Teachers' guide to numeracy assessment instrument*. Nottingham: University of Nottingham.

- Asare, K. (2015). Exploring the kindergarten teachers' assessment practices in Ghana. *Developing Country Studies*, 5(8), 2225-0565.
- Bekoe, S. O., Eshun, I., & Bordoh, A. (2013). Formative assessment techniques tutors use to assess teacher-trainees' learning in Social Studies in Colleges of Education in Ghana. *Research on Humanities and Social Sciences*, 3(4), 20-30.
- Black, P. & William, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy and Practice*. CARFAX, Oxfordshire, 5(1): 7-74.
- Black, P. (2010). Formative Assessment. *International Encyclopedia of Education*, 3, 359-364.
- Black, P., Harrison, C., Lee, C., Marshall, B., & William, D. (2003). *Assessment for learning*. London: Open University Press.
- Black, P., Lee, C., Harrison, C., & William, D. (2004). Teachers developing assessment for learning: Impact on student achievement, *Assessment in Education*, 11(1), 49-64.
- Bordoh, A., Bassaw, T. K., & Eshun, I. (2013). Social Studies tutors' cognition in formative assessment in Colleges of Education in Ghana. *Development Country Studies*, 3(11), 1-11.
- Dragemark Oscarson, Anne & Oscarson, Mats (2010) Using the CEFR in the foreign language classroom. In J. Mader and Zeynep Urkun (Ed.). *Putting the CEFR to Good Use* (pp.83-92). IATEFL: Kent.
- Eshun, Bordoh, Bassaw & Mensah (2014). Evaluation of social studies students' learning using formative assessment in selected colleges of education in Ghana. *British Journal of Education*, 2(1), 39-48.
- Harlen, W. (2007). Teachers' summative practices and assessment for learning -tensions and synergies. *Curriculum Journal*, 16(2), 207-223.

- Hedge, T. (2001). *Teaching and learning in the language classroom*, Volume 106. Oxford,, UK: Oxford University Press.
- Leedy, P. & Ormrod, J. (2005). *Practical research: Planning and design* (8th ed.). Upper Saddle River, NJ: Merrill Prentice Hall. Thousand Oaks: SAGE Publications.
- Mateo, J., & Sangra, A. (2007). Designing Online Learning Assessment through Alternative Approaches: Facing the Concerns.  
<http://www.eurodl.org/?keyword=online%20learning&article=294>
- Nolen, S. (2011). The role of educational systems in the link between formative assessment and motivation. *Theory into Practice*, 50, 319-326.
- O'Farrell C. (2009). Enhancing student learning through assessments: A toolkit approach(On line) Available at; [www.tcd.ie/teaching-learning/academic-development/assets/pdf/250309-assessment-toolkit.pdf](http://www.tcd.ie/teaching-learning/academic-development/assets/pdf/250309-assessment-toolkit.pdf) Retrived 13.09.2014
- Osuala, E. C. (2001). *Introduction to research methodology*. Onitisha, Nigeria: Africana EEP Publishers Ltd.
- Ozer, O. (2004). Constructivism in Piaget and Vygotsky. *Fountain magazine*, issue 48. (On-line) Available at; [www.fountainmagazine.com/issue/detail/CONSTRUCTIVISM-in-piaget-and-vygotsky](http://www.fountainmagazine.com/issue/detail/CONSTRUCTIVISM-in-piaget-and-vygotsky). Retrieved on; 25.05.2015
- Sofo, S., Ocansey, R. T., Nabie, M. J. & Asola, E. F. (2013). Assessment practices among secondary physical education teachers in Ghana. *International Online Journal of Educational Sciences*, 5(2), 274-281.

- Spiller, D. (2009). *Assessment: Feedback to promote learning*. The University of Waikato: New Zealand. (On line) Available at; [www.waikato.ac.nz/tdu/pdf/booklets/6-assessmentFeedback.pdf](http://www.waikato.ac.nz/tdu/pdf/booklets/6-assessmentFeedback.pdf) Retrieved 13.09.2014
- Udoukpong, B. E., & Okon, C. P. (2012). Perception of formative evaluation practices and students' academic performance in junior secondary certificate examination in social studies. *International Journal of Business and Social Sciences*, 3(15), 204-212.
- UNESCO (2000). *The Dakar framework for action, education for all: Meeting our collective commitments*, adopted by the World Education Forum Dakar, Senegal, 26 28 April 2000, Paris: UNESCO.
- Vygotsky, L. S. (1935). The problem of teaching and mental development during school age]. In L. S. Vygotsky, *Mental development of children in the process of teaching* (pp. 3–19). Moscow and Leningrad: GIZ.
- Yueming, J. (2004). *English as a second language: Teacher's perception and use of classroom-based reading assessment*. Doctoral Dissertation, Texas A&M University. (Online) Available at; <http://oaktrust.library.tamu.edu/handle/1969.1/3102> Retrieved 15.1.2015.