

## The Value of Continuous Assessment Strategies in Students' Learning of Geography in Senior High Schools in Ghana

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### Abstract

This survey investigated the views of geography teachers and students on the value of continuous assessment strategies in students' learning of geography in senior high schools in the Cape Coast Metropolis and Cape Coast North District within the Central Region of Ghana. Data were collected with the use of two sets of questionnaires from 20 geography teachers and a random sample of 198 geography students. Descriptive statistics were used to analyze the data. The study revealed that although there are various kinds of continuous assessment strategies, geography teachers most often used take-home assignment, written test and recap exercise to assess how geography students learn geography. It was found that the use of continuous assessment helps students to understand difficult areas as well as master the content of geography. Continuous assessment also makes students more confident and ready for final examinations. Therefore, it was recommended that geography teachers need more assistance in devising the rubrics for using the various kinds of continuous assessment strategies.

**Key concepts:** Assessment, continuous assessment, value, students' learning and continuous assessment strategies

### 1. Introduction

The aim of every educational programme is to help learners acquire a framework of knowledge and concepts that lead to the total development of the individual. It is only through the use of assessment procedures that one can establish the extent to which educational goals have been attained. Assessment involves the measurement of the extent of progress made by an individual in the process of learning. It is the process of collecting, synthesizing and interpreting information for the purpose of decision-making. In broad terms, assessment includes all the strategies teachers employ to gather descriptive information in their classroom (Airasian, 1991; Butt, 2000).

To establish the level of students' progress, most educationists resort to the use of various forms of continuous assessment strategies. Airasian states that structured formal test, observation, interview, oral question, portfolios and projects are the different approaches that are commonly used by teachers to assess student learning. Continuous assessment of learners' progress could be defined as a mechanism whereby the final grading of learners in the cognitive, affective and psychomotor domains of learning systematically takes account of all their performances during a given period of schooling (Falayalo, 1986; Etsey, 1992). Airasian (1991) describes continuous assessment as an assessment approach which should depict the full range of sources and methods teachers use to gather, interpret and synthesize information about learners: information that is used to help teachers understand their learners as well as to plan and monitor classroom instruction.

The use of continuous assessment is seen as a part of the measures that can be used to improve educational outcomes as well as students' learning. According to Resnick and Resnick (1992), alternative forms of assessment, if properly utilized, can adequately serve as a positive tool in the teaching-learning process. Garcia and Pearson (1994) also allude that classroom assessment, when effectively implemented, can provide teachers with the kind of diagnostic information necessary to serve the learning needs of individual students. Assessment is viewed as a tool which can foster student thinking. Regarding the use of assessment in geography education, Butt (2000) states that assessment strategies "should seek to improve the learning of pupils" (p. 12). Much of this literature suggests that there are various forms of strategies that can be used to assess and improve students' learning of various disciplines.

#### 1.2 Statement of the Problem

Even though continuous assessment is very important in terms of improving student learning of instructional practices, it appears that teachers are over-burdened with workload and consequently, they fail to employ various continuous assessment strategies that can provide a comprehensive picture of students learning. According to Etsey (1992), since the process of continuous assessment is formative, systematic and comprehensive, it has increased the workload of teachers. Consequently, he posits that the "teacher resorts to unfair means in providing the requisite data for each pupil" (Etsey, 1992, p. 90). The research tends to suggest that the philosophy of continuous assessment is shrouded with mixed blessings.

Although Butt (2000) asserts that continuous assessment can enhance student learning of geography, research

suggests that it is difficult to implement continuous assessment programmes. Teachers attitudes toward continuous assessment approaches and lack of requisite skill in constructing items and administering continuous assessment are issues that do not permit the use of continuous assessment strategies to assess student learning (Amedahe, 1989; Alausa, , n. d). Consequently, various teachers rely on different strategies in their quest to assess students' learning in various subjects. This portrays that both teachers and students are unaware of the value of assessment strategies in the teaching and learning process.

Moreover, the issue of the kinds of continuous assessment strategies that are mostly employed by geography teachers to assess and improve geography students' learning of geography is not much researched in the Ghanaian context. It is therefore against this foregone scenario that a study of this nature should be undertaken to find out the values of various continuous assessment strategies in student learning of geography.

### *1.3 Purpose of the Study*

The study sought to find out the value of continuous assessment strategies in student learning of geography at the Senior High School Level. Specifically, the study provided evidence for how frequent geography teachers use various continuous assessment strategies as well as the value of continuous assessment in promoting student learning of geography.

### *1.4 Research Questions*

The study sought answers to the following research questions:

1. What continuous assessment strategies are mostly used by geography teachers to assess student performance in geography?
2. How often do geography teachers employ these strategies to assess students' learning of geography?
3. What is the value of continuous assessment strategies in students' learning of geography?

## **2. Review of Literature**

Various studies have pointed out that continuous assessment strategies being used by the teacher are likely to contribute to student learning in schools. According to Onuka (2006), teachers need to use a variety of instruments to effectively measure their students' traits and that the outcome of the assessment are used to assist the student to improve upon their learning skills. Also, Carnoy (1999) indicated that teachers have had to rely on continuous assessment in order to monitor their students' academic progress and performance. However, Etsey (1992) stated that large class sizes do not permit teachers to use class tests, assignment, projects as well as observations to assess student learning.

Plessis, Prouty, Schubert, Habib and Eileen (2003) have asserted that continuous assessment promotes dialogue among teachers and students to generate knowledge in order to improve the teaching and learning process. According to them, "Continuous assessment tells teachers if they need to re-teach something, which students need to be re-taught, and what the students need in order to improve their learning" (Plessis, et al., 2003, p. 6). Through the use of continuous assessment, teachers are given the responsibility to find out what students in their classes know and are able to do. They further maintain that such strategies are used to determine the kind of remediation and enrichment activities to provide as well as to identify which students need assistance. Mwebaza (2010) confirms this by indicating that continuous assessment helped students to revise more effectively and to also gain confidence. He also stated that continuous assessment tends to make students ready for the final examination

Onuka and Onabamiro (2010) found that regular individual assignments engender higher student learning and achievement because they form sources of feedback on the performance of the students and assist students to develop critical mind and good study habit. Thus, through assessment strategies like individual and group assignments, students are propelled to learn more so as to improve on their academic performance and compete favourably with their learning peers.

Although Plessis et al. (2003) indicate that the most commonly used continuous assessment strategies include oral presentation, practical test and interviewing learners, other studies have revealed that continuous assessment is not being implemented in terms of a wide range of alternate assessment strategies as it was intended to be, with pen-and-paper testing still being the more dominant practice (Deonarain; 2004; De Gaume & Naidoo, 2004). Thus, schools should design a range of assessment modes, such as oral questioning, observation of students, project work and assignments, according to their curriculum plans, so as to collect continuous information on students' progress and to give feedback on what students have learned and achieved. The information collected will help motivate students' learning and help teachers find ways of bringing out more effective teaching and learning.

Mwebaza (2010) found that written tests, take-home assignments and recap exercises dominated teachers' continuous assessment strategies. He also found that checklist was the less used strategy while oral test and questionnaire were not used at all. The researchers found out that teachers had gained very little training in the use of checklists. On how frequent these were being used, the study reported that recap exercises were given

more frequently while written tests and take home assignment were less frequent. Checklist and observation were rarely used. According to the respondents oral tests and questionnaires were never used all.

This review points out that although there are numerous assessment strategies, teachers do not make maximum use of these strategies. This might be due to the fact that such teachers do not even know the value of those continuous assessment strategies in the teaching and learning process. Also, empirical studies have not established how the use of continuous assessment can contribute to the teaching and learning of geography in the Ghanaian educational context. This forms the thrust of this paper.

### 3. Methodology

The research adopted a cross sectional survey design to carry out the study. According to McMillan (1996), a cross-sectional survey is a descriptive research in which “information is collected from one or more samples or populations at one time” (p.182). The use of this design paved the way for the researchers to simply study the various continuous assessment strategies that were employed by geography teachers at that particular time.

The target population comprised all geography teachers and form four geography students in all Senior High Schools in the Cape Coast Metropolis and Cape Coast North District in the Central Region of Ghana. Form four geography students were used for the study because they had much experience and exposure to instructional processes and would be in suitable position to provide adequate information on how the use of various continuous assessment strategies might have aided their learning of geography. A census survey was used to collect data from all the 25 geography teachers in the study area. The use of the census method was justified in the sense that there was the need to collect data from all geography teachers whose total population was small and could easily be reached. The proportional simple random sampling technique was employed to select 20% out of the 1100 geography students. This yielded a sample of 220 students, although 198 responded to take part in the survey. This proportional technique was consistent with Fink’s (2001) guidelines which point out that where a population is a few hundreds, the suitable sample should be 20% of each group.

Two sets of structured questionnaire were developed and used to collect data from both groups of respondents. The purpose for using two sets of questionnaires was to confirm as well as cross validate the responses that were to be generated from both geography students and teachers. The closed ended items in both sets of questionnaire were structured with such responses as Very Often, Often, Not Often and Never which are scored as 3, 2, 1, and 0 respectively. Also, a four-point Likert scale of strongly Disagree (1), Disagree (2), Agree (3) and Strongly Agree (4) was used to design the items that meant to elicit responses on the value of continuous assessment strategies on students’ learning of geography.

The instruments were personally administered to the respondents in their various schools by the researchers in February, 2013. This paved way for the researchers to explain the purpose of the study and also to make clarifications to the participants. Each respondent was issued a copy of the questionnaire and was granted a maximum of 30 minutes to complete and return it to the researchers.

Descriptive statistics namely frequencies, percentages, means and standard deviations were used to analyze the data that were collected. Descriptive statistics were used because it enabled the researchers to analyze and describe the data in order to address each specific research question in the study (Pallant, 2005). The criterion mean values used to analyze the data for research questions one was as follows: 0 =Never, 0.5-1.4=Not Often; 1.5-2.4=Often; and 2.5-3=Very Often. Moreover, a decision mean value of 2.5 and above was used to interpret those responses that were in agreement with the various statements on the value of the continuous assessment to students learning of geography while a mean value of less than 2.5 meant that the respondents disagreed with the statement.

### 4. Results and Discussion

This section of the paper deals with the presentation and discussion of the findings of the study. The findings are organized and discussed in accordance with the various questions that guided the study.

#### 4.1 Continuous Assessment Strategies mostly used by Geography Teachers

The first research question was posed to find out from the geography teachers who participated in the study about the various kinds of continuous assessment strategies that they mostly used to assess students’ learning of geography. The results are presented in Table 1(See Appendix 1).

The results in Table 1 clearly show that a majority of 16 respondents representing 80% of the geography teachers indicated that they mostly used take-home assignment to assess the level at which students learn the content of geography. Moreover, 15 (75%) and 13 (65%) of the respondents were of the view that they mostly used test (oral/written) and recap exercise respectively to assess how their geography students learn geography. Thus, it emerged from the study that test, take-home assignment and recap exercise are the most used continuous assessment strategies in geography lessons. These findings of the study are consistent with previous results that which indicated that written tests, take-home assignment and recap exercises dominated teachers’ continuous

assessment strategies (Mwebaza, 2010). It was, however, found that project work, questionnaire, observation and checklist are not mostly used by geography teachers to assess students' learning of geographical knowledge. Etsey (1992) noted that that project, checklists and questionnaires were less used by teachers as continuous assessment strategies. From Mwebaza's and Etsey's studies, one can therefore surmise that geography teachers are glued to the use of particular types of continuous assessment strategies and do not ensure variety in the use of continuous assessment strategies in assessing student learning of geography at the senior high school level.

#### *4.2 How Often Geography Teachers employ various kinds of Continuous Strategies*

The study also examined how often geography teachers use the various kinds of continuous assessment strategies to assess students' learning of geography at the senior high school level. The views of both geography teachers and students were elicited and the results are presented in Table 2(See Appendix 1).

The results as indicated in Table 2 show that 50% of geography teachers never used oral test to assess students' learning of geography ( $M= 1.3$ ,  $SD = .93$ ) whilst 55% of the respondents indicated that they often used written test to assess their students' learning of the subject ( $M= 3.2$ ,  $SD= .69$ ). This implies that although geography teachers have been using test as a continuous assessment strategy, they often use written test instead of oral test to assess students' knowledge of geography. This supports Deonarain's (2004) finding that pen and paper testing remains the more dominant continuous assessment strategy among teachers.

Moreover, it was found that a majority of 70% of the geography teachers stated that they very often employed take-home assignment to gauge how well geography students had learnt certain geographical concepts, knowledge, ideas, principles, generalizations and theories ( $M= 3.7$ ,  $SD=.72$ ). It is also obvious from the results presented in Table 2 that 80% of geography teachers very often used recap exercise to assess students' learning of geography.

Thus, the study revealed that written test, exercise and take-home assignment are the main continuous assessment strategies that geography teachers very often employ to assess their students' learning progress during the teaching-learning process. While the study showed that oral test was often used as continuous assessment strategy, most geography teachers were of the view that questionnaire, observation and checklist are rarely used as continuous assessment strategies. The next section contains a discussion on the value of continuous assessment in students' learning of geography.

#### *4.3 Value of Continuous Assessment Strategies in Student's learning of Geography*

The central purpose of this study was to find out the perspectives of geography students about the utilitarian role of continuous assessment strategies in students' learning of geography. The responses that were generated and analyzed are presented in Table 3(see Appendix 1).

The geography students agreed that continuous assessment helps students to understand difficult areas of geography ( $M= 3.1$ ,  $SD= .89$ ). This is because when students are given tasks either in the form of test or take-home assignments, they are mandated to revisit the issues learnt during the teaching-learning interaction. This provides an opportunity for them to concentrate and learn the topics that might initially seem difficult to them. Consequently, this will help to improve upon students' learning of geography. This supports Butt's (2000) assertion that continuous assessment can enhance students learning of geography.

Although the respondents did not support the idea that students who do well in continuous assessment also perform better in final examinations ( $M=2.1$ ,  $SD= .85$ ), they strongly agreed that continuous assessment makes students more confident and ready for final examinations. Thus, continuous assessment reduces anxieties associated with the one-shot final examination but rather boosts their level of confidence to prepare for the final examination.

Moreover, it is indicative from Table 3 that the geography students agreed that continuous assessment arouses students' attention during the teaching-learning process ( $M= 2.9$ ,  $SD= .84$ ) and also makes them to master the content of geography ( $M=2.9$ ,  $SD= .79$ ). Studies have revealed that continuous assessment helps students to revise more effectively and to also gain confidence. Thus, continuous assessment tends to make students ready for their final examinations (Mwebaza, 2010; Onuka & Onabamiro, 2010).

## **4. Conclusions**

The continuous assessment practices of geography teachers are not comprehensive in nature. This means that most geography teachers do not employ alternative forms of continuous assessment strategies to evaluate their students' learning of geography. Geography teachers do not uphold the new paradigm of continuous assessment strategies which calls for the use of varied forms of continuous assessment to assess more authentic practical tasks and also allow for the assessment of constructs which are either difficult to assess or have emerged as part of the information age (Pellegrino, 2010).

Although geography teachers at the senior high school level might have been introduced to alternate continuous assessment strategies like the use of projects, observations, questionnaires, interviews and checklists during their pre-service teacher training, they often used written test, recap exercise and take-home assignment to gauge the



extent to which students have mastered the content of the subject. This may be attributed to teachers' limited exposure to the new paradigm of authentic assessment in their professional practice. This unfortunate state of affair coincides with the findings of several studies that teacher-made tests and exercises are the widely used continuous assessment strategies among educators in classrooms (Deonarain, 2004; De Gaume & Naidoo, 2004). Finally, geography students feel that there is a need for continuous assessment. The inherent educational value in continuous assessment provides an opportunity for the students to learn and master difficult areas of the subject. Continuous assessment also arouses their interest and makes them pay attention during the teaching and learning process.

## 5. Recommendations for Practice

Geography teachers need more assistance in devising the rubrics for the various kinds of continuous assessment strategies. As a consequence, extensive in-service workshops on continuous assessment techniques are required by this category of teachers. This will help to equip the teachers with the necessary skills that are needed to fully implement the new approach in assessment.

Moreover, subject advisors from the Ghana Education Service should be resourced to enable them undertake regular visits to schools. This will help them to ensure that schools are faithfully adhering to the implementation of the policy guidelines on continuous assessment. These experts will also help to assist schools and individual geography teachers who are experiencing difficulties in the implementation of continuous assessment policy.

The Ministry of Education and Ghana Education Service should provide logistical, financial and material assistance to schools and deserving geography teachers to enable them vigorously prosecute the continuous assessment agenda. Guidelines for constructing and administering continuous assessment, storage facilities (for product assessment) among others should be readily offered to schools to support the successful implementation of various continuous assessment strategies.

## References

- Alausa, Y.A. (n.d.) *Continuous assessment in our schools: Advantages and problems*. Retrieved on 20/11/ 2012 from [www.nied.edu-na/journal/article.pdf](http://www.nied.edu-na/journal/article.pdf).
- Amedahe, F. K. (1989). *Testing practice in secondary schools in the Central Region of Ghana*. M.Ed Dissertation, University of Cape Coast, Cape Coast.
- Airasian, P.W.(1991). *Classroom assessment*. New York: McGraw-Hill.
- Butt, G. (2000). *The continuum guide to geography education*. New York: Continuum.
- Carnoy, M. (1999). *Globalization and educational reform: What planners need to know*. Retrieved November 5, 2012 from <http://www.unesco.amu.edu/pdf>.
- Deonarain, S. (2004). *An investigation into teachers' views of continuous assessment (CA) and its implementation in grade 12 higher grade mathematics in the Ethekwini region*. Master's Thesis , University of KwaZulu-Natal, South Africa.
- Etsey, Y. K .A.(1992). What is continuous assessment? *The Oguaa Educator*, **10**(1), 82-92.
- Falayajo, W. (1986). *Philosophy and theory of continuous assessment*. A paper presented at a workshop for inspectors of Education in Odor State, Nigeria.4<sup>th</sup> December.
- Fink, L, R. (2001). *How to sample in survey*. Thousand Oaks, CA: Saga Publication.
- Garcia, G. E., & Pearson, P.D. (1994). Assessment and diversity. In L. Darling-Hammond, (Ed.), *Review of research in education*, (pp. 337-391), Columbia: Teachers College University.
- De Gaume, A., & Naidoo, J. P. (2004). *School evaluation for quality improvement. An ANTRIEP Report*. Retrieved June 3, 2012 from <http://www.unesco.org/iie>.
- McMillan, J. H. (1996). *Educational research: Fundamentals for the consumers* (2<sup>nd</sup> Ed.). New York: Harper Collins.
- Mwebaza, M. (2010). *Continuous assessment and students' performance in "A" Level secondary schools in Masaka District in South Africa*. Retrieved November 8, 2012 from [www.make.ac.ug/documents/makefiles/theses](http://www.make.ac.ug/documents/makefiles/theses).
- Onuka, A. (2005). *Improving students' performance through feedback mechanism in secondary schools*. Ibadan: University of Ibadan.
- Onuka, A. (2006). *Continuous assessment as an instrument of achieving learning objectives*. Research Report, Ibadan: University of Ibadan.
- Onuka, A., & Onabamiro, A. T. (2010). The effect of formative test, individual assignment and group assignment on student achievement in Junior Secondary School Mathematics. *International Journal of Educational Leadership*, **3** (3), 274-287.
- Pallant, J. (2005). *SPSS survival manual: A step by step guide to data analysis using SPSS for windows (Version 12)*. London: Open University Press.

Pellegrino, J.W. (2010). Technology and learning -assessment. In P. Peterson, E. Baker & B. McGaw (Eds.), *International Encyclopedia of Education* (pp. 42–47). Oxford: Elsevier.  
 Plessis, J., Prouty, D., Schubert, J., Habib, M., & Eileen, G. (2003). *Continuous assessment: A practical guide for teachers*. USAID: Office of Education  
 Resnick, L. B., & Resnick, D. P. (1992). Assessing the thinking curriculum: New tools for educational reform. In B. R. Gifford, & M. C. O'Connor (Eds.), *Changing assessment: Alternative views of aptitude, achievement, and instruction*, (pp.37-75). Boston: Kluwer Academic Publishers.

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#### Appendix 1

**Table 1: Continuous Assessment Strategies mostly used by Geography Teachers (N= 20)**

CA* Strategy	Yes		No	
	No.	%	No.	%
Oral/Written Test	15	75.0	5	25.0
Take-home Assignment	16	80.0	4	20.0
Recap Exercise	13	65.0	7	35.0
Project work	7	35.0	13	65.0
Questionnaire	4	20.0	16	80.0
Observation	5	25.0	15	75.0
Checklist	3	15.0	17	85.0

CA\* = Continuous Assessment

**Table 2: How Often Geography Teachers use Various Continuous Assessment Strategies**

CA* Strategy	V.O %	O %	N.O %	N %	M	SD
Oral Test	5	10	35	50	1.3	.93
Written Test	25	55	20	0	3.2	.69
Take-home Assignment	70	10	20	0	3.7	.72
Recap Exercise	80	15	5	0	3.8	1.0
Project work	0	20	40	30	2.4	.86
Questionnaire	0	5	30	65	1.3	.76
Observation	5	15	25	55	1.4	.92
Checklist	10	15	25	65	1.2	.82

CA\* = Continuous Assessment; M = Mean; SD = Standard Deviation

**Table 3: Students' Views concerning the Value of Continuous Assessment (N=198)**

Statement	M	SD
CA* helps me to understand difficult areas of geography	3.1	.89
CA makes students concentrate their efforts to learn difficult areas of geography	3.2	.80
Students who perform well in CA also perform better in the final Examinations	2.1	.85
CA makes students more confident and ready for the final examinations	3.6	.83
CA arouses students' attention during teaching-learning process	2.9	.84
CA makes students to master the content of geography	2.9	.79
CA increases retention memorization of geographical facts and concepts	2.4	.68

CA\* = Continuous Assessment; M = Mean; SD = Standard Deviation

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