

Original Research Article

The relationship between continuous assessment and final examination scores; implication for quality teaching

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Abstract

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The basic aim of this study was to find out whether continuous assessment (CA) had any effect on the final examination scores obtained by the 200 and 300 level students studying social studies in the Faculty of Education, Nasarawa State University. The design employed was causal-comparative in which the variables were correlated to establish the research measure. The sample comprised 260 students (148 at 200 level and 112 at 300). Continuous assessment and final semester examination results were obtained, coded and analyzed using the Pearson Product Moment Correlation Analysis (r). The result showed a significant relationship between continuous assessment and the examination scores. This finding had an implication for classroom teaching. The paper therefore recommended that continuous assessments of students should be given a more serious attention by teachers.

Keyword: Correlation, continuous assessment, examination scores, social studies, teaching

INTRODUCTION

Continuous Assessment (CA) is a formative mode of evaluation that is, in an ideal form, systematic, comprehensive, objective and guidance-oriented. Because of these characteristics, CA is acclaimed to be a progressive and objective method of evaluating learners' achievement-gains from class instructions and indeed, their general developments physically, mentally, socially, morally, culturally and spiritually as well as their acquisitions of manipulative and movement skills, particularly where it is properly and fully implemented (Anikweze, 2010). Airasian (2001) described CA 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, plan and monitor instruction and establish a viable classroom culture.

Continuous Assessment is a mechanism whereby the final grading of a student in the cognitive, affective and

psychomotor domains of behaviour takes account, in a systematic way of all his performances during a given period of schooling. Such assessments involve the use of variety of modes of evaluation for the purpose of guiding and improving learning and performances of the students. The following instruments can be used in CA:

- i. Teacher – Made Test (TMT)
- ii. Standardized Achievement Test (SAT)
- iii. Oral Test e.g. Quiz
- iv. Structured Response Test e.g. Objective test, multiple choice tests.
- v. Essay Test or Free Response Test
- vi. Performance Tests (Assessment of skills)
- vii. Multiple Choice Test. This has key (answer) and options (distracters).

It can be;

- (a) True/False, Yes/No.
- (b) Completion Items
- (c) Selection Items

- (d) Similarities
- (e) Analogue
- (f) Matching
- (g) Best answer

It can be seen easily that continuous assessment is a method of evaluation which Barrow and McGee in Inbar-Lourie (2008) explain as, a continuous process, for it determines the value of a process, an action, a characteristic or device, and there is a follow-up. Continuous assessment as a system of evaluating students' performance has been in existence in all states in Nigeria since the inception of 6-3-3-4 system of education in 1982 (O'kwu and Orum, 2012). This research is interested in studying the relationship between continuous assessment scores and final examination grades obtained by 200 and 300 level students studying social studies in the Faculty of Education, Nasarawa State University. For such a study, Owoyemi (2000) suggests the use of students' grades in a course or groups of courses. This poses the main problem for this study. That is, what is the effect of continuous assessment on student's semester examination scores? This led to the only research question and the only null hypothesis.

Research Question

To what extent does the continuous assessment of 200-Level and 300-Level Social Studies students correlate with their end-of-semester examination scores?

Null Hypothesis:

H_{01} : There is no significant relationship between continuous assessment scores of 200-level and 300-level students reading social studies in Nasarawa State University and their end-of-semester examination grades.

METHODS

Research design

The design used in this study was causal-comparative where the variables were correlated to establish the research measure.

Sample

The sample for the study was 260 comprising 148 200-level and 112 300-level social studies students in the 2012/2013 session.

Research Instrument

Continuous assessment scores of 148 students in SSE226 and 112 in SSE324 as well as their end-of-semester scores in these two courses served as variables and they were correlated to establish their relationship.

Data Analysis

Data collected through the above mentioned research instruments were coded and the coefficient of relationship obtained through Pearson Product Moment Analysis.

RESULT

The result of data analysis is shown in table below:

Table above shows the mean score ($\bar{x}$) of 15.48 and the standard deviation (sd) of 3.51 for CA scores and 20.054 ($\bar{x}$) and 4.85 (sd) for end-of-semester grades. The calculated .17 is greater than the critical r-value of 0.102 for significance with 258 degrees of freedom (df). This means that there is a significant positive influence of continuous assessment (CA) on students' semester examination results. Hence the null hypothesis was rejected.

DISCUSSION

The result of this research shows that continuous assessment scores have an effect on final scores. This is in consonance with O'kwu and Orum's (2012) study that showed that there was an effect of continuous assessment on the final scores at the Junior Secondary School (JSS) level in mathematics.

Assessment is important because it drives students learning. Most students tend to focus their energies on the best or most expeditious way to pass their "tests". Teachers can therefore use assessment strategies to manipulate the kinds of learning that takes place.

In the most general sense, assessment is the process of making a judgment or measurement of worth of an entity (e.g. person, process or programme). Learner assessment is best concerned as a form of two-way communication in which feedback on the educational process or product is provided to its key stakeholders (McAlpine, 2002).

Specifically, learner assessment involves communication to teachers (feedback on teaching); students (feedback on learning); curriculum designers

Table. Showing Pearson Product Moment Analysis of the relationship between students Continuous Assessment scores and their end-of-semester examination grades.

N=260

	$\bar{x}$	sd	r
CA Scores	15.46	3.51	1.7
End-of-semester scores	20.054	4.85	

Significant at .05, df = 258, critical r = 0.102

(feedback on curriculum) and administrators (feedback on use of resources).

Assessment strategies that focus predominantly on recall of knowledge will likely promote superficial learning. On the other hand, if a teacher chooses assessment strategies that demand critical thinking or creative problem-solving, we are likely to realize a higher level of student's performance or achievement. In addition, good assessment can help students become more effective self-directed learners (Angelo and Gross, 1993).

The result of data analysis in this work implies that there is a relationship between quality of teaching and the quality of students' continuous assessments. Teaching is an interactive process that facilitates learning. It is a series of interactions between someone in the position of teacher and someone in the role of learner with the explicit goal of changing one or more of the learner's cognitive states (what he knows or believes or his skill in performing cognitive tasks) or affective states (his attitudes, values and motives (Bidwell in Fan, 2012). The Federal Republic of Nigeria, FRN (2002) sees teaching as a systematic, rational and organised process of transmitting knowledge, attitude and skills in accordance with professional principles.

Nuthal and Snook (1973) identified and discussed three distinct models of teaching which have provided the stimulus and structure for contemporary teaching research. These are the behaviour-control, the discovery and the rational models. Each of these models consists of a set of associated ideas and concepts, more or less, organised around a larger conception of what teaching ought to be like and how it ought to be viewed.

Protagonists of the behaviour-control model view teaching as a method of controlling the behaviour of students and conditions of learning. Teaching is conceived as an activity in which the student learns through the teacher's authority. Teaching is approached as a management procedure which ought to be accomplished as quickly and as efficiently as possible. Objectivity, precision and economy are the prime methodological virtues. It is claimed that the essential task of teaching is to get students to perform precisely delineated responses (Taber, Glasor and Schaefer, 1965). The teacher's task is to form associated bonds

between subject-matter stimuli and appropriate student responses. In relation to behaviour-modification, teaching is viewed primarily as the management of the classroom.

The discovery-learning model incorporates those views of teaching which place greatest emphasis on the self-directed activity of the student. Teaching is conceived of as an activity in which the student learns partly through his own initiative and partly with the guidance of the teacher. When discovery methods are used, students learn how to explore a situation for themselves (Bruner, 1966), how to go beyond the information given in a situation, and how to behave in a scientific manner and think in an inductive style (Wittrock in Kalu, 1996). Proponents claim that discovery learning is the most powerful and effective kind of learning and must be used where what is being done has a major significance.

The rational model owes a lot of its impetus to the application of analytic philosophy to educational issues. Central to this model is the claim that teaching must be concerned with rationality and that the practice of teaching must be influenced by the logic of argument and justification. The assumptions underlying the model are that:

- (a) Man is a rational being whose behaviour cannot be completely understood in terms associated with animal life or machines; and
- (b) Thinking and learning are traits which are distinctively human. Man, the rational animal, is also the symbol-using animal. Language must therefore play a key role in teaching on account of its intimate connection with thinking and with rationality. In fact, the rational model views teaching as a predominantly linguistic affair.

Protagonists of this model agree that (i) there is some connection between teaching and learning and (ii) teaching is a human activity which is goal-oriented and intentional. Furthermore, since teaching is the activity of a human agent working upon students who are also rational agents there are moral limits to what may count as teaching. Thus, at all stages in teaching, the students' reason must be engaged and the teacher must submit himself to the independent judgment of the students.

The nature of teaching can be summarized with Gage's (1963) definition of teaching as any form of interpersonal influence aimed at changing the ways in

which other person can or will behave. This definition implies that teaching is an activity or process which is observable and can be observed. As an interpersonal activity, it involves verbal interactions between the teacher and one or more students as well as inter-student, teacher-material and student-material interactions. Again, learning is intended in teaching. Teaching may be effective or ineffective only in relation to student learning. Okebukola (1986) reports that class participation had the greatest independent contribution (22%) to the variance in achievement scores while Udeani (1997) submits that classroom interaction accounts for about 74% and 71% of the variation in students' cognitive achievement and process skills acquisition respectively.

CONCLUSION

The major conclusion forwarded by this research is that there is a strong relationship between students' continuous assessment scores and their semester examination scores. Educational assessment provides the necessary feedback we require in order to maximize the outcomes of educational efforts. The assessment of learners' learning provides objective evidences necessary in the decision-making process in education. Good measurement resulting in accurate data is the foundation of sound decision-making.

There is little doubt among educational practitioners about the special value of assessment as a basic condition for effective learning. The major problems of assessment of learners have been in the approaches or methods. One of the important aspects of continuous assessment is the availability of valid and reliable tests which could be used in all schools. There is a need to construct these tests following established procedures and practices. To make the result comparable across all the schools, teachers need to be equipped with skills of test construction and administration. This could be done through teacher training institutions so that teachers are equipped with such skills as part of their training and certification.

Ministry of Education could also organize workshops on test construction and administration as in-service training for serving teachers. Teachers should also be able to measure the learners' affective attributes such as

attitudes, motives, interest, values and other personality characteristics. These would provide clues about the interest patterns of learners which could be used in their placement into schools of higher learning and for employment purposes. Thus, teachers should be encouraged to form favourable attitudes towards the practice. They should be made aware of the requirement of the system, its importance and how to implement it.

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