

**An evaluation of the awareness of the need to ensure  
validity in the continuous assessment component of  
examination by some Lecturers of Kaduna  
Polytechnic**

By

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## **Abstract**

Marks emanating from continuous assessment (CA) being forty (40) of each subject or course in most cases form an integral part of the final results of students earned at the point of graduation from all levels of education the world over. At the tertiary level, particularly, while care is taken to ensure that examination question setting and administration are carefully managed to ensure validity among other considerations, the management of CA is entirely left to the dictates of individual lecturers. This paper evaluates the awareness of the importance of CA by lecturers of Kaduna Polytechnic and draws their attention to the need to ensure validity in CA by engaging a set of questionnaires. The data obtained was analyzed using frequency counts and contents analysis. The conclusion of the findings suggests that the lecturers do not attach the desired importance to CA when compared to Examination and do not go out of their way to ensure the validity of the items in their CA. To improve the situation, the paper suggests the organization of a workshop to discuss the subject matter alongside the strategies to engage in order to achieve validity in CA as much as in examination through peer collaboration.

## **Introduction**

Continuous assessment (CA) at all levels of education forms an integral part of the overall assessment of learners. Assessment itself is an essential aspect of teaching and good teaching cannot exist without good student assessment (Badmus, 2005). Assessment is generally used to determine how well an educational process has addressed its set objectives (Anikweze, 2005). While its broad purpose according to Hayward (2007, p.258) is “improving learning”, specifically assessment as Ali (2005) suggests is a system of a combination of a comprehensive reporting format that produces extensive, credible, dependable information that forms the basis for certifying learners’ competence or knowledge. Every assessment requires students to complete a task or an activity. A valid task should reflect actual knowledge, engage and motivate students to perform to the best of their ability and be reviewed by experts to judge content quality and authenticity. Since parents, teachers, school authorities and all concerned make decisions pertaining to employability, grades, promotion and graduation of learners based on assessment, the issue of validity is crucial, because, it is the most important single attribute of a good test (Ministry of Education, ND).

Validity according to an Anonymous (ND, p.1) “refers to how well a test measures what it is purported to measure. It is the accuracy of an assessment – whether or not it measures what it is supposed to measure”. Phelan and Wren (2006, p.1) add that “for a test to be reliable, it also needs to be to be valid” even though an assessment which is reliable may not necessarily be valid whereas an assessment which is valid “is almost always reliable”. A further dimension of validity according to Darr (2005, p.55) states that “it is better understood as an evaluation of the quality of the interpretations and decisions that are made on the basis of an assessment result” Hence, the issue of validity in assessment generally and continuous assessment particularly is important.

Meanwhile, teachers at all levels of education in Nigeria have to manage the conduct of CA mostly by their individual selves and only very occasionally in groups with colleagues with no definite guidelines. It is not in practice for school authorities to put any measures in check to ascertain the validity of the instrument that is produced for continuous assessment exercises whereas all school authorities insist on the scores emanating from them and which when provided are added up to examination scores to make up term/semester and graduating scores. Such a simplistic approach to the conduct of CA is responsible for the allegation that “the implementation of

CA is a caricature” of learners, more or less (Afemikhe, Awala and Okonmah, 2005, p.5) and teachers should not remain indifferent to the future of their students whom they teach through the decisions they make relating to their assessment (Uwakwe, 2005).

### **Statement of the problem**

The pertinent issue here is that CA is not accorded the same attention as examination whereas in most schools across board, CA marks per subject/course is as much as forty (40) which is accepted as pass mark for end of term/semester examinations. To derive the end of semester score in Kaduna Polytechnic, and similar tertiary institutions in Nigeria, for instance, examination questions are set by teachers and handed over to their departments which send them to experts in sister institutions for moderation during which the questions are scrutinized to ensure validity, then they are brought back and administered on students. Thereafter, the examination scripts are marked by the lecturers following which the experts who moderated the questions come over to vet the marked scripts in order to ensure that the standard expected is maintained, which also further ensures validity.

Meanwhile, such treatment is not extended to the conduct of CA in the case of which individual lecturers simply set CA questions, administer and mark independently to obtain the scores that are added to the examination score of students and handed over to the department as the total score of students per course, per semester. The result of this practice could mean the conduct of CA which lacks validity and such a situation should be arrested without further delay.

### **The Purpose of the paper**

The purpose of this paper is to explore the possibility of instituting some checks and balances in the conduct of CA through a healthy exchange of useful insights and ideas gained from training workshops and educational conferences relating to the construction and administration of CA instruments, scoring them and interpreting them as well as communicating the scores to the parties involved including the students in order to ensure validity and credibility of assessment results.

Also, this paper has the purpose to initiate the desire in teachers to ensure validity in CA instruments through the creation of some awareness on the issue. Already, much positive discussion has held during the course of administering the questionnaire

Furthermore, this paper anticipates to thoroughly look into the problem of non-validity in CA with a view to proffer solutions to improve the situation.

## **Theoretical framework**

This study is hinged on the claim by Ministry of Education, TKI (ND, p.1) that “. . . Validity is the most important single attribute of a good test as well as the view that every assessment task should reflect among other things the judgment of experts in terms of content quality and authenticity (Anonymous, ND) which is why “Validity can be considered as the key issue in assessment” (Darr, 2005, p.55).

## **Significance of the paper**

The need to ensure validity in assessment is crucial which accentuates the first significance of this paper.

Also, the CA component of assessment is significant and deserves the kind of attention being accorded to it in this presentation in order to ensure the genuineness of overall assessment.

The move undertaken in this presentation has helped to bring validity in CA to the front burner as it has generated awareness and further discussion on the subject matter which is also a positive move towards enhancing the strength of CA and subsequently assessment as a whole.

## **Research questions**

Finding answers to the following questions helped to shape the focus of this paper:

1. Do the lecturers engage in the conduct of CA?
2. Do the lecturers understand the concept of validity in CA?
3. Have the lecturers been ensuring validity in CA?
4. What measures could be taken to improve the prevailing situation?
5. What is the opinion of the lecturers on the conduct of CA?

## **Population and sample**

The population of the study was the lecturers in the College of Administrative Studies and Social Sciences (CASSS), Kaduna Polytechnic, Nigeria. The College houses nine departments. The choice of the College was deliberately to obtain divergent views on the this research area from the different professionals in the departments of Languages, Mass Communication, Library and Information Science, Rehabilitation Science, Social Sciences, Social Development, Legal Studies, Local Government and Public Administration. Fifty percent of the population made up the sample for the study to the tune of 167 sample members

## Methodology

The methodology for this study included the random selection of the sample of 167 members from the population for which a set of questionnaire was designed and administered. The questionnaire contained 14 items and the data obtained was analyzed using frequency counts and content analyses.

## Data presentation and analyses

The data presentation and analysis are based on the order of the research questions as follows:

### Research question 1: Do the lecturers engage in the conduct of CA?

**Table 1: 1. Lecturers' engagement in the conduct of CA**

| Questionnaire number | item  | Expected frequency | Response | Responses and percentages |     |    |   |
|----------------------|---|--------------------|----------|---------------------------|-----|----|---|
|                      |   |                    |          | Yes                       | %   | No | % |
| 1.                   | Do you administer CA to your students every semester? | 167                |          | 167                       | 100 | 0  | 0 |

The data in table 1 above enquired from the respondents if they engaged in the conduct of CA every semester to which they all admitted which meant that every member of the sample was suitable for inclusion and participation in the research.

### Research question 2: Do the lecturers understand the concept of validity in CA?

**Table 2: Lecturers' understanding of the concept of validity in CA**

| Questionnaire number | item   | Expected frequency | Response | Responses and Percentages |    |    |   |
|----------------------|--|--------------------|----------|---------------------------|----|----|---|
|                      |  |                    |          | Yes                       | %  | No | % |
| 5.                   | Do you understand the concept of validity in assessment? | 167                |          | 159                       | 95 | 8  | 5 |

Item 5 of the questionnaire sought to know if lecturers understood the meaning of the concept of validity to which majority (95%) of them responded in the affirmative. When asked by item 14 for the definition of validity, however, some responses obtained proved the respondents wrong. The many responses obtained were as follows:

- a. Validity in assessment is a check on questions and the response from the students to see their response
- b. Conformity and relevance of making sure the questions asked are in the syllabus and relevant to the course or subject
- c. An assessment within the test of time for proper evaluation. It means that the test measures what it set out to measure and that the result will be correct.
- d. This means that the questions meant to test students' knowledge acquired in class
- e. Assessment should be reliable in order to produce good results. It should be able to cover enough areas of the syllabus
- f. The process of ensuring that the questions are consistent with what the assessment intends to measure . . . through face or content validity
- g. It should measure what it should measure
- h. The suitability of the questions to test the skills and levels of learning required in the objectives of the lesson taught based on the curriculum
- i. It should measure appropriately what/the extent of learning and possibly reinforce areas of weakness
- j. Appropriate, accurate and reliable judgment of CA
- k. Being factual in your assessment
- l. The ability to find the level of understanding by the students
- m. Validity of a question has to do with its ability to test the areas desired by examiner in accurate manner
- n. When the test measures to a most reasonable extent what it expects to measure
- o. A knowledge of whether the measurement captures exactly what it was meant to measure
- p. The validity in assessment is to see whether the students are studying well throughout the academic exercise

**Table 2 a: Summary of lecturers’ responses on the meaning of validity**

| S/NO | COMPACTED RESPONSES  | FREQUENCY | %   |
|------|--|-----------|-----|
| 1.   | The questions are set to measure what they should measure (c, f, g, m, n & o)  | 47        | 28  |
| 2.   | The questions cover enough aspects of the syllabus (b, h, I & p)               | 43        | 26  |
| 3    | The questions were meant to test students’ knowledge acquired in class (d & e) | 37        | 22  |
| 3.   | Unacceptable (a, k, j & p)   | 16        | 10  |
| 4.   | Nil  | 24        | 14  |
| 5.   | Total  | 167       | 100 |

A careful perusal of the above responses shows that 10% of respondent provided answers that were unacceptable (a, k, j & p) while as much as 14% of them did not provide any response which obviously meant that they had no idea about the concept, unfortunately. The 24% Of the respondents who had invalid and nil responses is significant.

**Research question 3: Have the lecturers been ensuring validity in CA?**

**Table 3: The lecturers insurance of validity in CA?**

| Questionnaire number | item   | Expected Response Frequency | Responses and percentages |    |     |    |
|----------------------|--|-----------------------------|---------------------------|----|-----|----|
|                      |  |                             | Yes                       | %  | No  | %  |
| 2.                   | Do you seek the view of your students on the | 167                         | 53                        | 32 | 114 | 68 |



|   |     |    |    |     |    |
|---|-----|----|----|-----|----|
| questions you set for CA?   |     |    |    |     |    |
| 3. Do you at times set CA questions on topics yet to be taught in class?                    | 167 | 38 | 23 | 129 | 77 |
| 4. Do you ask your colleagues' input on the questions you set for CA?                       | 167 | 91 | 54 | 76  | 46 |
| 6. Do you conduct CA because it is compulsory for you to do?                                | 167 | 99 | 59 | 68  | 41 |
| 10. Have your CA questions ever been vetted by a colleague?                                 |     |    | 32 | 114 | 68 |
| 11. Have your students ever complained that the contents of your CA test were not suitable? | 167 | 15 | 9  | 152 | 91 |

The issue of ensuring validity is the crux of the matter in this paper. Hence, 7 items of the questionnaire addressed it. The response to item 2 showed that more of the respondents (68%) said they did not seek the view of students on the contents of CA questions. However, in response to item 3 most of them (77%) asserted they did not set CA questions on topics which they were yet to teach where as 33% of them did. Responses to item 4 affirmed that more of the respondents (54%) sought the assistance of colleagues in the setting of CA questions which is in line with the claim of Darr (2005) that discussions with colleagues can help clarify any issues of construct in an assessment task. The Responses to item 6 disclosed that majority of respondents did not engage in the conduct of CA out of compulsion which is in line with the view that educational assessment must always have a clear purpose (Ministry of Education, TKI, ND). A greater number of respondents (59%) assured that all the tests they had administered measured what they set out to measure, however, the 41% who had a contrary view is significant and worrisome. The responses to item 10 should have be identical with those of item 4 but they were not which casts some doubts on the sincerity of some of the responses. The responses were rather opposite views instead of one confirming the other being the reason for the inclusion of both items on the questionnaire. To item 11, as much as 91% of the

respondents claimed that their students had never complained that the contents of their CA questions were not suitable but unless there is a feedback mechanism in place, it may be difficult to prove this claim. The situation may probably be true as it could have been in consonance with the response to item 2 above.

**Research question 4: What measures could be taken to improve the prevailing situation?**

Item 13 of the questionnaire was open ended and it generated the following views from the respondents as measures that could be taken to improve the prevailing situation in the conduct of CA in order to ensure validity:

1. There should be synergy among lectures while setting CA questions
2. CA questions should be vetted by senior colleagues
3. CA questions should be unambiguous and straight to the point
4. There is already the need to update on latest researches and adapt the content of the curriculum which should married to the special abilities of some of the students
5. Give a colleague for vetting and should only cover areas taught
6. Always encourage your students to read and make CA test impromptu
7. Set realistic questions based on the syllabus that allows for brain storming
8. New lecturers need to be guided on how to set both CA and examination questions
9. CA questions should be moderated by experts in the field of measurement and evaluation
10. Discussing CA questions with colleagues
11. Get the students to make comments on the CA questions they have written
12. Questions should be targeted towards improving the students’ understanding of the subject
13. CA questions should be asked only on topics that have been taught in class

| S/NO | COMPACTED RESPONSE   | FREQUENCY | PERCENTAGE |
|------|--|-----------|------------|
| 1.   | There should be synergy in the setting of CA questions (1,2,5,8,9 &10) | 109       | 65         |
| 2.   | CA Questions should be standardized (3,7,11,12 &13)                    | 21        | 13         |
| 3.   | Unacceptable responses (4 & 6)   | 12        | 7          |

|    |       |     |     |
|----|-------|-----|-----|
| 4. | Nil   | 25  | 15  |
| 5. | Total | 167 | 100 |

The inclusion of item 13 in the questionnaire was to give the respondents who are also stakeholders in education the opportunity to contribute to the discussion in this paper and also to earn their cooperation in any subsequent actions to follow. Majority of the responses obtained being 65% indicated the willingness to collaborate in the conduct of CA which is a positive development and has advised one of the recommendations of this paper

### **Research question 5: What is the opinion of the lecturers on the conduct of CA?**

**Table 5: The opinion of the lecturers on the conduct of CA?**

| Questionnaire item number  | Expected Frequency | Response | Responses and percentages |    |     |    |
|--|--------------------|----------|---------------------------|----|-----|----|
|  |                    |          | Yes                       | %  | No  | %  |
| 8. Do you think CA questions should be moderated?                              | 167                |          | 53                        | 32 | 114 | 68 |
| 9. Do you agree that CA questions should only be set by experienced lecturers? | 167                |          | 53                        | 32 | 114 | 68 |
| 12. Do you think it is better to work in a group to set CA questions?          | 167                |          | 76                        | 46 | 91  | 54 |

Three of the items on the questionnaire sought the views of the respondents on the conduct of CA. Majority of them (68%) disapproved of the idea of the moderation of their CA questions that is set by all lecturers rather than by only experienced ones in items 8 and 9 respectively although more of them (54%) expressed the willingness to work in a group to set CA questions.

### **Summary of findings**

Some invalid assertions on the concept of validity were made by some of the respondents indicating the need to sensitize on the concept

The 41% of respondents who claimed that their CA often did not measure what was intended is too significant to be ignored

The disparity in the responses to questions 4 and 10 seems to point up the insincerity of the respondents in completing the questionnaire.

The respondents are willing to collaborate and work in groups to set CA questions but unwilling to allow the moderation of the questions.

## **Conclusion**

The level of awareness on the subject matter of validity by the respondents requires to be built upon. Some of them knew what was right to do but seemed not to bother doing them perhaps as a result of lack of prompt from school authorities or ignorance of the relevance of validity in CA for genuine educational assessment.

## **Recommendations**

- ✓ The authorities of the College from which the sample was obtained should organize a workshop on the theme of validity to expose it along with the strategies for ensuring it. Such an activity may not be a once off event but periodically, perhaps, bi annually.
- ✓ The College authorities should introduce the idea of mentoring new inexperienced lecturers on the setting of questions alongside other aspects of teaching.
- ✓ The senior and experienced lecturers should be appointed internal assessors and given the responsibility to vet all CA questions, or
- ✓ The entire lecturers should be formed into groups and some measures instituted to ensure that every lecturer does not set CA questions in isolation but within such groups.
- ✓ The College should enforce the timing for the conduct CA every semester because if it holds uniformly like examinations, it will be easier to collaborate for it.

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