

# Validity Concerns in Education Assessment and the Competence of the Classroom Teacher

An Overview of the Uganda Classroom Teacher Competence

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## **Abstract**

Validity is one of the critical indicators of the quality of an assessment instrument. It is basically the measure of the extent to which an assessment instrument measures what it was designed to measure; by showing the degree of relationship between the curriculum standards and the instrument.

Assessment instruments are tools regularly designed and employed by a classroom teacher to measure learners' progress and, eventually, to determine learners' achievement overtime. To achieve this, the instrument must possess the ability to deliver effectively. Delivering effectively means that the instrument measures exactly what it was tasked to measure. To a classroom teacher, the assessment instrument should pass atleast the content and construct validity levels.

The validity of an instrument is taken care of during the process of development of that very instrument. A classroom teacher regularly develops and uses test instruments to assess the teaching and learning that goes on in his/her class. This presupposes that the teacher possesses the required skills or ability to come up with a good quality instrument. Such ability is the teacher's competence to cater for validity, among other qualities, of an assessment instrument; and, to a classroom teacher, mostly the content and construct validity. Therefore, the development of an effective assessment instrument requires the developer to have atleast basic competence in the principles of assessment.

The paper sets to give an overview of the classroom teacher's competence to attend to validity concerns during assessment.

*Keywords: Uganda, teacher's, competence*

## **Introduction**

Validity is defined simply as the quality of an instrument to measure what it is set to measure. It shows the degree of relationship between the instrument and the curriculum standards. This makes validity one of the key indicators of the quality of an assessment instrument. The validity of an assessment instrument is usually taken care of right from the beginning of the process of test development. This process can be progressive and can also be started and conducted by teachers as part of the preparations for teaching, because assessment is part and parcel of teaching and learning.

There are various categories of validity in education circles. These include: content validity, construct validity and criterion-related validity. Content and construct validity mostly concern the classroom teacher in the day to day teaching and learning. Content validity seeks to determine whether the items in the test measure the subject matter that the item writer is looking at, and that the test is representative of this. On the other hand, construct validity refers to whether the item or test is measuring the construct or competence it purports to be measuring.

For a teacher to be able to attain atleast the content and construct validity in the day to day activities of education assessment, the teacher must possess the required skills to do so.

## **Background**

A classroom teacher is the general manager of the teaching and learning process. Such a person is expected to be highly skilled in the subject matter of his or her specialization, as well as in the skills of teaching and management of teaching. Some of the vital skills include the ability to effectively prepare for a lesson and to effectively deliver a lesson. Effective delivery of a lesson translates into effective teaching which results into effective learning. During the process of teaching, a teacher is expected to determine whether his/her teaching is/ has been effective or not (to assess whether learning has taken place). The teacher may do this using exercises or tests. Appropriate exercises or tests are usually prepared concurrently with the lessons.

Penny Mckay (2007), noted that the effective assessment of learners is integrally tied to the principles of learning adopted within the curriculum in which the children are learning. Mckay continues to argue that if the underlying pedagogical principles of assessment and learning are not aligned, this would indicate a serious problem within the assessment procedures being used. This argument further affirms that assessment, teaching and learning should be conducted concurrently. Therefore apart from the training the teacher gets in his/her teaching subject(s)

and its/their way of delivery during teaching, the teacher has to be effectively trained in the basic principles of sound assessment.

According to Evangerine Harris Stefanakis (2002), the word 'assess' comes from the Latin word 'assedere', which means 'to sit beside'. Literally, therefore, 'to assess' means to 'sit beside the learner'. This definition gives us the starting point of the validity of an education assessment instrument or process. The development of an assessment instrument or process, rising

from within the context of the teaching and learning being assessed is an issue of validity. Validity at this stage is, therefore, best managed by someone who understands the context of the teaching and learning. The best person who knows and understands the context of learning of a group of learners is the one who sits beside those very learners; and that person is their teacher.

The teacher is the best person who effectively understands his/her learners: their abilities, strengths, weaknesses and the context in which they are learning. Indeed, it is the teacher who helps them to advance in learning. For the teacher to be at the centre of any assessment efforts targeting his/her learners is key to ensuring the validity of such assessment. This presupposes that the teacher is given adequate holistic training, during the teacher training course, to enable him/her not only to teach, but also to manage all the expected assessment concerns.

Professor William Senteza Kajubi (2000), observed that the improvement of the quality of education, and therefore, closing the gap between schooling and education will be attained through better teacher education and training to produce teachers who are not only competent, but also confident to assess their own pupils objectively. The competent and confident teacher the Professor alluded to here, is one who can assess the learners taking into consideration all the validity concerns, in addition to all the other assessment concerns.

### **The Status of the Classroom Teacher in Uganda in Education Assessment**

Despite the assumed key role the teacher is expected to play in the assessment of learners, there is widespread education assessment illiteracy among teachers in Uganda in particular, and the whole education sector in general. Worse still, there are still some educationists and education managers, who continue to nurse a false belief that being a specialist in a learning area, alone qualifies one to be an expert in the assessment requirements in that discipline as well.

Assessment illiteracy is commonly visible at the various levels of education in the country including even teacher training institutions and universities. Some teacher training institutions that attempt to offer education assessment training to the teachers, only manage to give

inadequate and ineffective training which is not in consonance with the requirements of the classroom based assessment which teachers need most.

### **NAPE 2013 Survey**

The observed high incidencies of assessment illiteracy in the country led to an investigation, during the 2013 NAPE survey, of the status of the teachers' assessment knowledge and practice. The objective of the investigation was to determine the level of assessment knowledge and practice of S 2 teachers of English Language, Mathematics and Biology in secondary schools in Uganda.

Findings of the investigation give a better picture of the status of the Uganda teacher in the assessment world and, therefore, a reflection of the extent of his/her competence to manage the validity concerns of education assessment, in addition to other concerns of assessment.

### **Sample of Teachers**

The investigation was conducted among secondary school teachers. A random sample of secondary schools stratified by zone was selected. The country is divided into sixteen zones as per national assessment zoning purposes. Each zone consists of a number of districts ranging from four to ten. Within each zone, schools were selected from each of the districts. The number of schools selected from a particular zone was proportional to the S 2 enrolment in the zone. However, a minimum of three schools were selected from each of the districts within the zone. Districts which could not raise the required minimum number of schools had all their schools included in the sample. The sample of teachers included one S 2 teacher in each of each of the three subjects: English Language, Mathematics and Biology from the sampled schools. The teachers sampled possessed different categories of teaching qualifications as indicated in the table below.

Table : Distribution of Teachers by Highest Teaching Qualification

<b>Highest Teaching Qualification</b>	<b>N</b>	<b>Percentage</b>
Bachelors Degree in Education	616	35.5
Grade V (Diploma) Secondary	891	51.4
Grade V (Diploma) Primary	10	0.6
Grade III (Certificate) Primary	8	0.5
Others	209	12.0
Total	1,734	100.0

### **Instrument: Interview Schedule**

To determine the teachers assessment knowledge and practice, an interview schedule was employed to gather information from the teachers. During the interview, each teacher was required to respond to the items related to assessment knowledge and practice.

## Findings

1. The investigation revealed that teachers lack adequate curriculum interpretation and analytical skills. Many teachers teach following textbooks instead of the approved curriculum. This is partly caused by the teachers inadequacy in the skills of curriculum interpretation. Indeed one of the reasons cited in the NAPE Report (UNEB, 2013) for the low achievement in Mathematics at Senior two, is the practice by teachers of teaching without following the curriculum and instead follow textbooks.

The findings cited above, coupled with the inadequate training in education assessment skills, renders the tests developed by such teachers basing on textbooks and not the curriculum, questionable on the aspects of validity.

Similarly, the effective development of assessment instruments should ideally be preceded by effective curriculum analysis. Such analysis enables proper identification of the assessable content and constructs from the curriculum; and the kind of assessment required, the suitable method of assessment and test instruments appropriate for particular constructs. For example, some constructs can better be assessed through : observation, written tests, practical work, continuous or summative assessment. The correctness of the kind and manner of assessment required has implications for validity, which implications could be negative if proper curriculum analysis is not undertaken.

2. A proportion of 63.7% of the teachers interviewed reported that they had been trained in the skills of 'setting tests' during their teacher training course. However, only 22.7% and 20% of them thought that teacher's 'masterly of the subject content' and 'knowledge of the curriculum' respectively, were relevant enough in the preparation process of a test.

The teachers' responses are an indicator that majority of them are unaware of the ideal that 'masterly of subject content' and 'knowledge of the curriculum' are key elements in the conduct of a valid assessment. Indeed, only 29.7% of the teachers surveyed indicated that 'setting tests' was one of the uses to which they can apply to a curriculum. This implies that many of these teachers set tests over and over again without necessarily referring to the curriculum.

Indeed, teachers subject their learners to frequent tests within a school term. These include: beginning of term, weekly, mid term and end of term. Some education stakeholders have even blamed the school system for conducting more testing than teaching. If most of these tests are prepared by teachers (70.3%) who do not use the curriculum to set tests, then the validity of such tests, which occupy most of the learning time, is almost non-existent.

3. Similarly, a sample of a test blue print was flashed to the teachers, and the teachers were required to name it. Out of the 1,683 teachers who responded to the item, only 4.5% could identify the test blue print.

A test blue print is a key instrument in the education assessment process. It helps the test developer to balance the content and constructs in the test against the curriculum standards. Ignorance about a test blue print is one tip of the iceberg and an indication that the constructs assessed by the teachers in the course of their teaching are, perhaps, haphazardly chosen. Indeed, the NAPE Report (UNEB, 2013) mentions insufficient knowledge of assessment as one of the reasons for poor performance in Biology at Senior two level.

4. Only 42.6% of the teachers responded that they were trained to 'mark tests' during their teacher training course. Another 33% indicated that the little knowledge they have about marking was acquired through being Examiners with Uganda National Examinations Board. However, it should be noted that the training given to examiners of public examinations is so specific and only enough to enable them conduct the marking of a given examination. This implies, therefore, that about 57.4% of the teachers did not experience any training in 'marking tests' during their training. Due to this inadequacy and lack of assessment skills, it is very common to find teachers who set tests and use incomprehensive or irrelevant marking guides to score the tests. It is also true in some circles, that the attributes of a marking guide are still a strange thing.
5. One of the basic and most important reason for testing at the class / school level is to provide feedback to the teacher and learner ie. inform teaching. However according to NAPE 2013, only 33% and 23.2% of the teachers surveyed thought that testing at that level is meant to provide feedback to the teacher and learners, respectively. Majority, 79.1%, indicated 'measure what students know' as the main purpose for testing their learners. So to these, every test is meant to grade / rank learners. The idea of different kinds of tests serving particular purposes is alien to them, though the purpose of the test set should be clear if the assessment process is to ensure validity.

6. Asked about the sources of the tests they give to their learners, many teachers (93.5%) responded that they set their own tests; which is indeed a good practice (NAPE 2013). However, the quality of the tests they set leaves a lot to be desired because they (tests) lack the ingredients of a good test. This leads many headteachers to supplement their teachers' tests with tests purchased from established examination bureaus, or schools believed to be with teachers possessing some reasonable skills in assessment. Indeed, 31.6% , 12.7% and 10.7 % of the teachers mentioned supplementary sources of tests that they use as, other schools, commercial test publishers and local examinations boards, respectively (NAPE 2013).

Questions of validity are bound to arise, for example, as to whether such tests prepared in a foreign environment for a specific category of learners are valid for the learners who are subjected to them in a different environment.

In the NAPE Report of the 2014 survey (UNEB, 2014), it is recommended that for effective assessment, the teacher should set his/her own tests for his/her learners. The Report continues to argue that such tests reflect the teacher's understanding of the pupils and the context in which they learn.

It is important to note that commercial test publishers are focused on making profits , and have very little or no concern whatsoever about content or construct validity of the tests. Also true is that, they too lack the basic assessment skills like the teachers they sell the tests to.

The practice of buying tests for teachers is a deterrent to capacity building in assessment skills. In some schools, funds are budgeted for this kind of purchase. Once teachers realize that the headteachers prefer tests from outside the school to their own set tests, they relax and avoid any future attempts at setting. Eventually, even the few skills that the teachers had acquired during their training diminishes. This has adverse effects on the teaching-learning process and the much needed classroom based assessment.

## **Conclusion**

The foregoing discussions point to the inadequate assessment skills of the Uganda teacher, who is expected to be at the fore front in attending to all the validity concerns in education assessment, especially at the classroom or school level.



It is important to note, that there are already thousands and thousands of in-service teachers who are yearning for the same skills. How they would access them, is a hard question to answer. In-service courses in this discipline would require a lot of funds and technical personnel, both of which are scarce resources in the country at the moment. In the Vietnam Student Assessment Report (2009), it was observed that there are insufficient resources currently available to more systematically support teachers' development of skills in classroom assessment. It goes on to state that only adhoc mechanisms are being used to monitor the quality of classroom assessment practices which are considered to be weak. The resource scarcity situation as is reported to be in Vietnam does not differ from that of Uganda.

Conclusively, NWEA (2014), observed that "...educators are beginning to agree that assessment literacy or the knowledge of the basic principles of sound assessment practice, including terminology, development, administration, analysis and standards of quality is an essential component to successful teaching and learning".

In fact, efforts are underway by the Ministry of Education, Science, Technology and Sports to ensure urgent action through the inclusion of adequate relevant content on assessment in the teacher training curricula. However, provision of an adequate content on assessment in the curriculum is one thing and its implementation is another. Therefore, such efforts must be preceded by adequate training of the tutors or lecturers, who would be expected to implement the curriculum, in the required skills; taking into consideration the fact that education assessment is a technical area requiring those involved in it to be adequately trained. It should not only be mere training in the theory of assessment but also in its practical application in the classroom.

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