

Perceived Efficacy of University Lecturers in Conducting Assessment among Selected Universities in Tanzania

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Abstract

Assessment is an integral part of the teaching process as it provides information necessary for making informed decisions in any educational programme. University lecturers as all other educators need to be equipped with skills and knowledge on different methods of assessment for them to assess their students effectively. This study therefore was conducted to determine the literacy level of lecturers in the field of educational assessment in Tanzanian universities. The study sampled 48 lecturers from 4 universities offering teacher education in the country. These lecturers responded to a self-reporting questionnaire that required them to indicate their perceived competence in educational assessment. The literacy level of lecturers in educational assessment was found to be satisfactory but not very high as most of lecturers were found not to be aware on some methods of assessment including peer and self-assessment despite their significance in the learning process. Lecturers were also found not to be either preparing tables of specifications or conducting item analysis for each test they develop. Not all the universities were found to be conducting seminars and workshops on educational assessment despite of such seminars being needed by most of lecturers.

Key words: assessment, lecturer, competence

Introduction

One function of educators at all levels of education is to determine the extent to which learners are achieving the desired goals of the programme. This process of acquiring information about students learning is referred to as assessment (Ogula and Onsongo, 2009; Gronlund and Linn, 2009; Popham, 2008). It is through the use of assessment results, informed decisions about teaching and learning processes can be reached (Aiken, 2000). In the schooling system for example; decisions on advancing students to higher levels, repetition of classes and awarding certificates to indicate mastery of some skills depend on the use of results obtained from an assessment procedure. Therefore, assessment is an integral part of the teaching and learning process as it provides evidences of learning and success.

Assessment can either be in formative or summative forms. Formative assessment is conducted periodically during the course of instruction to provide continuous feedback to both learners and educators about learning success and failures (Ogula and Onsongo, 2009). Results of formative assessment are used to monitor the learning process during instruction for the purpose of improving

the learning process (Popham, 2008; Gronlund and Linn, 2000 and Nitko, 2001). Summative assessment on the other hand comes at the end of a given course for the purpose of determining the extent to which instructional goals have been achieved and evaluate both students and the teaching process (Gronlund and Linn, 2000).

Based on these two forms (formative and summative), assessment has two major roles in education. The first role is to measure the extent to which learning is taking place (assessment of learning) and the second role is using assessment for the purpose of improving the learning process (assessment for learning). Formative assessment is more concerned with assessment for learning whereby learning difficulties are identified and corrective measures are taken while summative assessment is concerned with assessment of learning aiming at determining the level at which learning objectives have been realized. Assessment methods in both forms involve written tests, individual and group assignments, questionnaires, examinations, peer and self-assessments, project, performance assessment and portfolios (Ford and Morice, 2003; Lyamtane, 2013 and Ogula and Onsongo, 2009).

Given the importance of assessment in education, the American Federation of Teachers (AFT), the National Council on Measurement in Education (NCME), and the National Education Association (NEA) (1990) have collaboratively outlined seven *Standards for Teacher Competence in Educational Assessment of Students*. The standards require educators to be able to choose and develop assessment methods appropriate for instructional decisions; administer, score, and interpret results; use assessment results when making educational decisions; develop valid grading procedures; communicate assessment results to various audiences; and recognize unethical methods and uses of assessment (Gronlund & Waugh, 2009. pp 13-13).

University lecturers as the other educators also need to assess their students' learning and provide evidence on the mastery of skills, knowledge and competencies and determine challenges associated with the learning process. Therefore, they also need to be equipped with skills in assessment since the quality of any assessment technique used and its consequences depends on lecturers' competence and knowledge in educational assessment (Alkharus 2014). Lack of proper techniques in assessment results into failure in promoting thinking ability among learners leading to poor learning outcomes that has been identified as being one of the challenges facing higher education in Tanzania (Mnubi, 2013; Kira, 2013).

In Tanzania, University education has been expanding from year to year. For example; during independence in 1961, there was only one University College but currently there are more than 50 universities and university colleges in the country (TCU, 2016). This implies that more students are being enrolled in different universities in the country. High enrollment rates of students goes hand in hand with a demand for more lecturers. These lecturers need to have skills and knowledge on educational assessment for them to be in good positions of making informed decisions about teaching and learning in universities.

In most universities in Tanzania, both continuous assessment and final examinations are conducted with more weight being given to the final examinations (Lyamtane, 2013). However, scores obtained in the continuous assessment tasks contributes to the final score a student gets at the end of the course. Lecturers do decide on the kind and number of assessment tasks to be given, frequency of assessing, weight of each assessment task and the administration of the assessment tasks. It was

therefore important a research to be conducted to assess the level of assessment literacy among university lecturers in Tanzania so as to determine if they are competent enough to effectively assess their students.

Statement of the Problem

Despite of assessment being an important aspect in the teaching and learning process, the whole process of formative assessments in universities is all left in the hands of lecturers (Lyamtane, 2013). University lecturers therefore need to be well equipped with skills and knowledge on different assessment techniques for them to effectively assess their students. The Government of Tanzania through TCU expects universities to conduct credible examinations at the end of each semester. This includes setting examinations according to the course outline, moderating before they are administered, insuring proper administration, marking objectively and giving out realistic results.

Along with other factors, effective assessment depends on knowledge of lectures in the field of assessment. Some studies conducted outside Tanzania however show lecturers not being familiar with continuous assessments (Ahmad 2014; Lian, 2014). Other studies on the contrary indicate that lecturers do perceive themselves as being more or less competent in the field (Abidin, 2015). This ambiguity therefore led to the current study to determine the perceived competence of university lecturers in conducting assessments in Tanzania where no such study had been conducted.

General Objective

The general objective of the study was to determine the level of assessment literacy among university lecturers in Tanzania.

Specific Objectives

- i. To determine the methods of assessment used by university lecturers in Tanzania.
- ii. To assess lecturers' competence on different methods of assessment.
- iii. To investigate lecturers' adherence to the requirements of effective assessment.

Null Hypothesis

There is no significant difference in the perceived assessment competence mean scores of lecturers with and without qualifications in the teaching profession.

Methodology

The study made use of stratified sampling technique to select 48 lecturers from 4 universities offering teacher education in Tanzania. The basis of stratification was on lecturers' qualification in the teaching profession. Lecturers with and without training in the teaching profession were included in the study. The selection of trained and untrained lecturers was sought so as to compare the level of competence in assessment between these two groups. Questionnaire for lecturers, interview guide for examination officers and focused group discussion guide for students were used to collect data.

However, since this section of the study is concerned primarily with how lecturers perceive themselves to be competent in educational assessment, only information from self-reporting questionnaires is presented. The questionnaire consisting rating scales was validated through the use of experts in research and assessment, pilot tested and modified before being used for data

collection. The collected data were then analyzed in terms of frequency, percentages, means and standard deviations by the aid of computer software and presented in tables. T-test for independent samples was used to test the study hypothesis through the aid of computer software (SPSS) version 22.

Findings

Methods of assessment used by lecturers in Tanzania

The first objective of the study aimed at finding out methods that university lecturers in Tanzania use to assess their students. Lecturers responded to a rating scale and their responses are summarized in table 1.

Table 1: Lecturers Responses on Assessment Methods Used

| Assessment tool | mostly used | | sometimes used | | rarely used | | never used | |
|----------------------------|-------------|------|----------------|------|-------------|------|------------|------|
| | f | % | f | % | f | % | f | % |
| Group assignments | 40 | 83.3 | 3 | 6.3 | 3 | 6.3 | 2 | 4.2 |
| Written tests | 37 | 77.1 | 2 | 4.2 | 6 | 12.5 | 3 | 6.3 |
| Final examination | 34 | 70.8 | 9 | 18.8 | 4 | 8.3 | 1 | 2.1 |
| Group presentations | 33 | 68.8 | 6 | 12.5 | 5 | 10.4 | 4 | 8.3 |
| Individual assignments | 31 | 64.6 | 10 | 20.8 | 5 | 10.4 | 2 | 4.2 |
| Quizzes | 25 | 52.1 | 16 | 33.3 | 5 | 10.4 | 2 | 4.2 |
| Oral questions | 25 | 52.1 | 16 | 33.3 | 6 | 12.5 | 1 | 2.1 |
| Observation | 20 | 41.7 | 18 | 37.5 | 8 | 16.7 | 2 | 4.2 |
| Field work | 15 | 31.3 | 20 | 41.7 | 12 | 25.0 | 1 | 2.1 |
| Individual projects | 13 | 27.1 | 11 | 22.9 | 19 | 39.6 | 5 | 10.4 |
| Students portfolios | 12 | 25.0 | 13 | 27.1 | 15 | 31.3 | 8 | 16.7 |
| Questionnaires | 11 | 22.9 | 11 | 22.9 | 17 | 35.4 | 9 | 18.8 |
| Group projects | 9 | 18.8 | 19 | 39.6 | 15 | 31.3 | 5 | 10.4 |
| Peer assessments | 7 | 14.6 | 16 | 33.3 | 16 | 33.3 | 9 | 18.8 |
| Students' self-assessments | 6 | 12.5 | 16 | 33.3 | 16 | 33.3 | 10 | 20.8 |

Results in table 1 show that group assignments were indicated to be mostly used by the majority (83.3%) of lecturers in assessing students. Written tests were ranked the second with 77.1% of lecturers indicating to be using it mostly. Final examination on the other hand was indicated to be mostly used by 70.8% of the lecturers. These findings imply that most of the lecturers in Tanzania use group assignments and individual tests in assessing their students. The use of group assignments could be due to the large number of students in universities offering teacher education that makes it difficult to assess students on individual basis. These findings are in agreement with Bentley and Warwick (2013) and Lyamtane (2013) who also found group assignments to find more favor among university lecturers.

It can also be depicted that students' self and peer assessments were indicated to be mostly used by least number of lecturers (12.5% and 14.6% respectively). This implies that peer and self assessments are rarely used by lecturers in assessing students. The dependence on written tests and group assignments while neglecting other methods of assessment may be due to the fact that lecturers are not aware of other methods. It is argued that written tests and examinations can measure both simple and complex learning outcomes (Aiken, 2000). However, they cannot adequately measure performance skills (Gronlund & Waugh, 2009). Therefore, it is important for

lecturers to use alternative methods including peer, self and authentic assessments for effective assessment.

Researchers further enquired from lecturers the reasons as to why they prefer to use particular methods of assessment. Lecturers responded to this question in their questionnaires as summarized in table 2.

Table 2: Lecturers' Responses on the Reasons for Using Assessment Methods

| Reasons | Main reason | | Minor reason | | Not a reason | |
|-------------------------------------|-------------|------|--------------|------|--------------|------|
| | f | % | f | % | f | % |
| Having knowledge on how to use them | 33 | 68.8 | 5 | 10.4 | 10 | 20.8 |
| Presence of resources required | 30 | 63.8 | 9 | 19.1 | 8 | 17.0 |
| Being well understood by students | 29 | 60.4 | 14 | 29.2 | 5 | 10.4 |
| Being relevant to the course | 28 | 58.3 | 10 | 20.8 | 10 | 20.8 |
| Being easy to implement | 26 | 55.3 | 10 | 21.3 | 11 | 23.4 |
| Feeling more comfortable with them | 23 | 47.9 | 12 | 25.0 | 13 | 27.1 |
| Simple to prepare | 21 | 43.8 | 19 | 39.6 | 8 | 16.7 |
| Does not require much time | 17 | 35.4 | 18 | 37.5 | 13 | 27.1 |
| Being recommended by the management | 16 | 33.3 | 14 | 29.2 | 18 | 37.5 |
| Being used by most lecturers | 15 | 31.3 | 17 | 35.4 | 16 | 33.3 |
| Lack of knowledge on other methods | 13 | 27.1 | 19 | 39.6 | 16 | 33.3 |

Data in table 2 show that having knowledge on how to use assessment methods was identified as being the main reason for choosing particular assessment methods by largest number of lecturers (68.8%). This implies that, along with other factors, having knowledge on how to use particular assessment methods remains the main reason as to why lecturers do use such methods of assessment. It can therefore be inferred that most lecturers do use group assignments and written tests in assessing their students since they have skills on how to use such methods. Lack of skills and knowledge on other methods of assessment could be the reason as to why they are not used.

Lecturers Competence on Methods of Assessment

The second objective of the study aimed at finding out the level of lecturers' competence on different methods of assessment. Lecturers responded by rating their perceived awareness on particular assessment methods as summarized in table 3.

Table 3: Lecturers' Responses on Awareness of Assessment Methods

| | Much known | | Known | | Somehow known | | Not known | |
|------------------------|------------|------|-------|------|---------------|------|-----------|-----|
| | f | % | f | % | f | % | f | % |
| Written tests | 39 | 81.3 | 4 | 8.3 | 5 | 10.4 | 0 | 0.0 |
| Quizzes | 37 | 77.1 | 4 | 8.3 | 5 | 10.4 | 2 | 4.2 |
| Final examination | 37 | 77.1 | 7 | 14.6 | 4 | 8.3 | 0 | 0.0 |
| Group assignments | 36 | 75.0 | 9 | 18.8 | 3 | 6.3 | 0 | 0.0 |
| Individual assignments | 35 | 72.9 | 10 | 20.8 | 2 | 4.2 | 1 | 2.1 |
| Oral questions | 32 | 66.7 | 10 | 20.8 | 6 | 12.5 | 0 | 0.0 |

| | | | | | | | | |
|----------------------------|----|------|----|------|----|------|---|------|
| Group presentations | 32 | 66.7 | 6 | 12.5 | 9 | 18.8 | 1 | 2.1 |
| Field work | 29 | 60.4 | 12 | 25.0 | 7 | 14.6 | 0 | 0.0 |
| Observation | 28 | 58.3 | 12 | 25.0 | 8 | 16.7 | 0 | 0.0 |
| Individual projects | 22 | 45.8 | 19 | 39.6 | 6 | 12.5 | 1 | 2.1 |
| Questionnaires | 21 | 43.8 | 8 | 16.7 | 15 | 31.3 | 4 | 8.3 |
| Group projects | 20 | 41.7 | 17 | 35.4 | 9 | 18.8 | 2 | 4.2 |
| Peer assessments | 18 | 37.5 | 10 | 20.8 | 17 | 35.4 | 3 | 6.3 |
| Interviews | 15 | 31.3 | 15 | 31.3 | 15 | 31.3 | 3 | 6.3 |
| Students portfolios | 15 | 31.3 | 18 | 37.5 | 12 | 25.0 | 3 | 6.3 |
| Students' self-assessments | 14 | 29.2 | 19 | 39.6 | 10 | 20.8 | 5 | 10.4 |
| Attitude scales | 11 | 22.9 | 16 | 33.3 | 14 | 29.2 | 7 | 14.6 |

Data in table 3 show that most of the lecturers (81.3%) indicated to be much aware of written tests followed by 77.1% who indicated quizzes and final examinations. Another large percent of lecturers (75.0%) indicated to be much aware with group assignments and 72.9% pointed out individual assignments. These findings imply that most of the lecturers consider themselves to be mostly aware with written tests, individual and group assignments, quizzes and final examinations. Being much aware on these methods of assessment may be the reason as to why most of them prefer to use written tests and assignments to assess their students.

Data from the same table however show that peer and self assessment was indicated being known to some extent by 35.4% and 20.8% of lecturers respectively. This implies that lecturers feel to be less competent on some methods of assessment. These findings are in agreement to the ones found by Ahmad (2014) and Lian (2014) that teachers do perceive themselves to be less competent in the field of educational assessment. Lack of assessment skills among university lecturers can be one of the reasons for most of them to prefer using written tests which are simple to prepare and administer (Yilmaz, 2017). These findings generally show that lecturers are much aware with some methods of assessment and less aware on others. The researcher further quantified the difference between the level of assessment awareness of lecturers with and without qualifications in the teaching profession as summarized in table 4.

Table 4: Group Statistics for Lecturers With and Without Qualification in Teaching

| qualification in the teaching profession | | N | Mean | Std. Deviation | Std. Error Mean |
|--|-----|----|------|----------------|-----------------|
| general competence | yes | 30 | 4.03 | .615 | .112 |
| | no | 18 | 3.78 | .647 | .152 |

Data in table 4 show that lecturers with qualification in teaching perceive themselves to be more competent in the field of educational assessment (mean = 4.03) than the ones with no such qualifications (mean = 3.78). Taking 5 as the highest mean and 1 being the lowest, findings on table 4 indicate that lecturers in the two groups are both above average. This means that both consider their literacy level in assessment to be good. However there is a difference in perception between the ones with qualification in teaching and those without. The observed difference could be due to the fact that lecturers with education background in teaching do courses in educational assessment. These courses seem to equip them with a good number of assessment techniques and methods.

To test whether the observed difference is significant, an independent sample t-test was run at 95% confidence level and the findings are summarized in table 5.

Table 5: Independent T-Test for Competence of lecturers with and without teaching qualification

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|--------------------|-----------------------------|---|------|------------------------------|--------|-----------------|-----------------|-----------------------|---|-------|
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | | Lower | Upper |
| general competence | Equal variances assumed | 1.970 | .167 | 1.367 | 46 | .178 | .256 | .187 | -.121 | .632 |
| | Equal variances not assumed | | | 1.350 | 34.495 | .186 | .256 | .189 | -.129 | .640 |

Findings of hypothesis testing show that though lecturers with qualification in the teaching profession considered themselves to be more competent in educational assessment (M = 4.03, SD = 0.615) than the ones with no qualification in the teaching profession (M = 3.78, SD = 0.647), the difference is not significant as $t(46) = 1.367$ and $p = 0.178$. Since p-value is greater than 0.05, the null hypothesis is not rejected. Therefore, there is no significant difference in perceived competence mean scores of lecturers with and without education backgrounds in the teaching profession. These findings suggest that some lecturers with qualification in the teaching profession do perceive themselves to be less competent in educational assessment and some though having no qualifications in the teaching profession do perceive to be competent.

The researchers further asked lecturers to indicate the extent to which they have trainings in the field of assessment as summarized in table 6.

Table 6: Lecturers Responses on Possession of Training in Educational Assessment

| | SA | | A | | U | | D | | SD | |
|---|----|------|----|------|----|------|---|------|----|-----|
| | f | % | f | % | f | % | f | % | f | % |
| I still need more training on assessment techniques. | 22 | 45.8 | 11 | 22.9 | 10 | 20.8 | 1 | 2.1 | 4 | 8.3 |
| I am capable of setting tests and examinations without assistance from my colleagues. | 19 | 39.6 | 19 | 39.6 | 8 | 16.7 | 1 | 2.1 | 1 | 2.1 |
| The knowledge I have on assessment techniques is enough to make me a good assessor. | 17 | 35.4 | 21 | 43.8 | 6 | 12.5 | 3 | 6.3 | 1 | 2.1 |
| I have attended a good number of seminars on assessment techniques. | 14 | 29.2 | 20 | 41.7 | 9 | 18.8 | 5 | 10.4 | 0 | 0.0 |
| The university always conducts seminars on assessment techniques. | 11 | 22.9 | 22 | 45.8 | 7 | 14.6 | 4 | 8.3 | 4 | 8.3 |

Data in table 6 shows that 45.8% of lecturers strongly agreed that they still need more training on assessment techniques and only 35.4% strongly agreed that the knowledge they have on assessment techniques is enough to make them good assessors. These findings imply that more than 50% of lecturers are not so much competent in educational assessment and thus they need to be trained

more. Moreover, only a small number of lecturers (less than 30%) consider themselves as being much competent in the field. This may be due to the fact that some universities do not conduct workshops and seminars on educational assessment as pointed out by 16.3% of lecturers. Therefore, these findings generally show that lecturers are not much confident about their competence in the field of educational assessment.

Lecturers Level of Adherence to Effective Assessment

The third objective of the study was to determine the level at which lecturers adhere to standards recommended by TCU being necessary for effective assessment of students. Lecturers were requested to indicate the extent to which they perform particular activities pertaining to effective assessment and their responses are summarized in table 7.

Table 7: Lecturers' Responses on Performing Activities Pertaining to Effective Assessment

| | always | | sometimes | | rarely | | never | |
|--|--------|------|-----------|------|--------|------|-------|------|
| | f | % | f | % | f | % | f | % |
| Marking scripts using marking schemes | 34 | 70.8 | 4 | 8.3 | 5 | 10.4 | 5 | 10.4 |
| Informing the students about the test before | 32 | 66.7 | 6 | 12.5 | 6 | 12.5 | 4 | 8.3 |
| Monitoring students' group assignments | 28 | 58.3 | 12 | 25.0 | 7 | 14.6 | 1 | 2.1 |
| Doing corrections with students after tests | 26 | 54.2 | 14 | 29.2 | 5 | 10.4 | 3 | 6.3 |
| Giving assessment feedback on time | 26 | 54.2 | 17 | 35.4 | 4 | 8.3 | 1 | 2.1 |
| Validating the tests before given to students | 23 | 47.9 | 17 | 35.4 | 4 | 8.3 | 4 | 8.3 |
| Performing item analysis | 22 | 45.8 | 16 | 33.3 | 6 | 12.5 | 4 | 8.3 |
| Preparing table of specification for each test | 15 | 31.3 | 21 | 43.8 | 7 | 14.6 | 5 | 10.4 |

Data in table 7 show that 70.8% of lecturers indicated to be always marking scripts using marking schemes and 58.3% reported that they always monitor students' group assignments. These findings imply that only a portion of lecturers do use marking schemes while marking or effectively monitor students group assignments. Despite most of lecturers reporting to be using group assignments, not all of them make efforts to ensure that all the members of the group participate and that the work is original. Failure of lecturers to make such efforts may be due to lack of skills on monitoring assessment activities and may lead to having results with low validity as not all students may participate in the group work.

Moreover, data in table 7 show that 31.3%, and 45.8% of lecturers indicated to always prepare tables of specification and perform item analysis respectively. This percentage is too low hence it can be inferred that only few lecturers do prepare tables of specifications and conduct item analysis. Preparation of tables of specifications is an important condition towards enhancing validity of tests while conducting item analysis helps to check the effectiveness of each item in the test. These two aspects need expertise to implement and therefore having few lecturers performing them is an indication that lecturers are not skilled enough in educational assessment.

Conclusion

University lecturers mainly use group and individual assignments, written tests and quizzes in assessing learners. Having knowledge and being familiar with assessment methods is the main reason for the choice of such methods. Therefore over dependence on traditional written tasks and

neglecting alternative forms of assessment which prove to be more authentic is because lecturers have no adequate knowledge on such methods.

Lecturers' competence in assessment is less satisfactory. This is because most of them have skills on tests and other written assignments only but not on other methods of assessment. However, lecturers with qualifications in the teaching profession perceived to be more competent in assessment methods than the ones with no teaching qualifications. This difference was not significant as the null hypothesis was not rejected. Therefore, both lecturers with and without teaching qualifications need to update themselves on assessment methods.

Despite of lecturers considering themselves to be knowledgeable in the field of educational assessment, only few of them do meet all the required standards for effective assessment. Therefore, there is a gap between what lecturers think they are aware of and what they actually do. Lecturers do consider themselves to be much competent in the field of educational assessment but in actuality they do less pertaining to effective assessment.

Recommendations

Lecturers need continuous updating of their educational assessment strategies as most of them are knowledgeable only with traditional methods. More emphasis should be on the ones who have no education background in the teaching profession. Moreover, technical aspects of assessment including preparation of tables of specifications and conducting item analysis need to be mastered by lecturers. These skills are necessary for lecturers to ensure validity in the entire process of assessment.

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