



## Training and Availability of Skills for Sustenance of Standard in Classroom Assessment Practices Among Lesotho Teachers

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### Abstract

The study used an inferential survey design in which a validated questionnaire was used to gather and analyze the views and perceptions of a random sample of 146 primary and 102 high school teachers at Qacha's Nek district in Lesotho. These were with regard to the influence training in assessment has on the availability of skill to carry out effective classroom practices that sustain standards in educational assessment and hence enhance quality of education. The sample was made up of 119 male and 127 female teachers, 103 of them with certificates, 41 with diploma and 102 with bachelor's degrees. Some 92 of them had 1-5 years of teaching experience, 57 had 6-10 years while 97 of them had above 10 years of such experience. Among them they attended a mean of 0.706 assessment-related workshops. The study involved the use of a face validated six-option Likert-type questionnaire with two sets of items consisting of: (a) a list of assessment skills to which teachers were required to indicate the level to which they possess each of them; and (b) a list of classroom assessment practices, which teachers were expected to indicate the frequency to which they applied each of them. A Cronbach alpha analysis gave the alpha coefficient of the instrument as .772 and .764 respectively for the two parts of the instrument. A composite of the number of assessment-related courses taken, and seminars and workshops attended were developed to operationalize each teacher's level of assessment training. Based on this, 137 of them were found not to have any training in assessment at all, while 73 had a little training and 35 had some training in assessment.

**Key words:** Assessment in education, assessment standard, assessment training, teachers' assessment skills and practices, Bloom taxonomy, Lesotho.

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## INTRODUCTION

The need for quality education cannot be over emphasized if African nations must achieved economic and technical development in the 21<sup>st</sup> century. Standard in assessment and hence quality education is closely tied to quality in classroom assessment. Classroom assessment is the fundamental means of developing human potentials; hence

effectiveness in classroom assessment provides a good foundation for such development. Effectiveness in classroom assessment depends, amongst others, on the quality of teachers' training on assessment. The regularity of teacher's exhibition of desirable assessment skills in the classroom cannot be achieved if teachers do not possess such skills in the first place. Learning in the classroom depends a lot on effective teaching which in turn depends on the exhibition of effective assessment skills during lessons. According to American Federation of Teachers (AFT), National Council of Measurement in Education (NCME) and National Education Association (NEA) (AFT, NCME & NEA, 1990), 'students assessment is an essential part of teaching and good teaching cannot exist without good assessment' (p. 3). Effective assessment involves the extent to which the teacher is able to use assessment to enhance learning by creating and maintaining a welcoming and conducive environment within which learners would want and like to learn (Nenty, 2007).

According to AFT, NCME and NEA (1990), standards for teachers' competence in educational assessment of students include skills in:

1. Choosing and developing assessment methods appropriate for instructional decisions.
2. Administering, scoring and interpreting the results of both externally-produced and teacher-produced assessment methods.
3. Using assessment results in making decisions about individual students, planning teaching, developing curriculum, and school improvement.
4. Developing valid pupil grading procedures which use pupil assessments.
5. Communicating assessment results to students, parents, other lay audiences and educators.
6. Recognizing unethical, illegal, and otherwise inappropriate assessment methods and uses of assessment information (pp. 30 - 32).

These competences subsume, among several others, the ability of developing and constructing good test items including writing items to measure all the cognitive levels of Bloom's taxonomy: conducting item/test analysis; performing test validation; and carrying out formative assessment. Stressing the importance of formative assessment in raising standards, Black and Wiliam (1998) noted that "Firm evidence shows that formative assessment is an essential component of classroom work and its development can raise standards of achievement, . . . Indeed, they know of no other way of raising standards for which such a strong prima facie case can be made" (p. 139).

Based on an extended analysis of what goes on in the classroom, Stiggins (1991) reported that "teachers spend a third to half of their professional time on assessment-related activities". And according to Nenty (1985), "next to teacher's skill on how to teach (method), and what to teach (content) is his/her skill on how to assess in order to maximize learning. And assessment is a part and parcel of every teaching method" (p.34). Hence one cannot be good at teaching if he does not possess some important fundamental assessment skills.

### ***Bloom Taxonomy.***

To know where to "begin in seeking to improve human thinking" and learning, we need to know more of the nature of human thinking (Houghton, 2004) and learning or human cognitive ability. Benjamin. S. Bloom and his colleagues (1956) provided education with this knowledge. They provided for a detailed hierarchical classification of human cognitive ability into six levels, from the lowest-order memorization skill through comprehension, application and analysis skills, to the highest-order creativity and evaluation skills. By doing this, they gave us an authentic tool for valid curriculum planning, instructional delivery and assessment (oz-TeacherNet, 2001). This arrangement has gone through some revisions towards perfection in our knowledge of human cognitive ability (oz-TeacherNet, 2001; Forehand, 2005).

### ***Statement of the problem and purpose of the study***

In developing countries like Lesotho, teachers' training institutions are very few and may not be well staffed in all teaching areas, especially in assessment. Thus, most teachers do not receive sufficient training on assessment. In secondary schools where trained teachers from these institutions are teaching the Cambridge Overseas School Certificate (COSC), pass rates have been low and declining. In these schools, assessment is examination- and not learning-focused and this tends to restrict aspects of education that might be of more value to young and developing minds. Teaching is directed towards memorization of facts which internal and external examination bodies are able to test in their examinations. There is little concern with the development of higher order cognitive skills, little encouragement to be creative or to challenge imparted knowledge (Ansell, 2002; Forehand, 2005).

This scenario is substantiated by the Ministry of Education's (1992) assertion that "The existing system of schooling suffers from critical problems including the decline of quality, lack of relevance to occupational and social realities and lack of effective quality owing to the nature of final examinations and the absence of other means of determining pupils' achievement from the national level" (p.4).

Given these problems, the present study seeks to find answers to the following questions: Firstly, what assessment skills do teachers in Qacha's Nek district possess and utilize during their classroom practices? Secondly, to what extent does their level of possession of relevant assessment skills influence their utility of such skills in the classrooms? And lastly, what is the influence of training on assessment on the availability and utility of assessment skills by teachers in this district?

### ***Research hypotheses***

To seek for answers to these questions, the following null hypotheses were tested:

1. Teachers at Qacha 's Nek do not possess to a significant level, the skill necessary to:
  - i. develop and construct good test items;
  - ii. write items to measure the cognitive levels of Bloom's taxonomy;
  - iii. conduct item review and item/test analysis;
  - iv. perform test validation; and
  - v. carry out formative assessment.
2. To a significant extent, teachers at Qacha 's Nek district do not regularly use the following classroom assessment practices:
  - i. develop and construct good test items;
  - ii. write items to measure the cognitive levels of Bloom's taxonomy;
  - iii. conduct item review and item/test analysis;
  - iv. perform test validation; and
  - v. carry out formative assessment.
3. The level to which teachers at Qacha's Nek possess relevant assessment skills does not significantly influence their assessment practices in the following areas:
  - i. test development;
  - ii. item analysis;
  - iii. cognitive levels of Bloom taxonomy;
  - iv. test validity and reliability; and
  - v. formative application of testing results.
4. There is no significant influence of training on assessment on the availability and utility of classroom assessment skills among teachers in Qacha's Nek district.

### **LITERATURE REVIEW**

Studies on teachers' assessment practices revealed that teachers are not generally well prepared to meet the demands of classroom assessment due to inadequate training (Mertler, 2003; Vandeyar & Killen, 2007; Zhang & Burry-stock, 2003). In a study to better understand how new teachers experience curriculum and assessments, Kauffman, Moore, Kardos, Liu and Peske (2002) found that, despite the state's development of standards for statewide assessments, these new teachers received little or no guidance about what to teach or how to teach it. Left to their own devices, they struggled day to day to prepare content and materials.

Grimes (2010) studied the meaning teachers give to grades through a descriptive non-experimental dissertation study of middle school teachers in USA. These teachers were asked four questions related to: primary purposes of grades; attitude towards grading; assessment methods; and grading practices. Among several findings, projects, student exhibits, essays, and work for extra credits were found to be associated with higher level of performance, while norm-referencing, classwork, participation, and matching were negatively associated with grades.

In another study, Chapman and Snyder (1991) conducted classroom observations of 212 teachers in 34 junior secondary schools in Botswana. Results from the study revealed that the primary discrimination was between certificate (untrained) and diploma (teacher training) teachers. The function was defined primarily by teacher preparation, teacher's logical presentation of material during the lesson, and the teacher's emphasis on discipline. Untrained teachers appeared

to have done less preparation for the class sessions being observed. Diploma teachers appeared to give more logical class presentation and tended to emphasize student development over control in their use of discipline.

In a study to investigate whether any relationships exist between the types of classroom assessments used in secondary mathematics classrooms and high stakes state assessment programs, Ohlsen (2007) conducted a survey of a random sample of 668 members in nine states. However, since the survey were mailed to the respondents, only 278 completed surveys were returned. The results reflect that, teachers reported highest frequencies of use for teacher created assessments, major exams and quizzes. Student-centred strategies such as performance-based assessments, individual projects, and team projects were used sparingly if used at all by between forty to fifty percent of the teachers. Zhang and Burry-Stock (2003) conducted a study to investigate teachers' assessment practices across teaching levels and content areas, as well as teachers' self-perceived assessment skills as a function of teaching experience and measurement training. Data from 297 teachers on the Assessment Practices Inventory were analyzed in a MANOVA design. The findings from a factor analysis they used, revealed that the construct of assessment practices and self-perceived assessment skills overlapped to some extent in terms of the underlying dimensions they measured, yet each construct maintained a certain degree of uniqueness. The overlap between assessment practices and self-perceived assessment skills was also reflected in a Pearson product-moment correlation coefficient of .71 that explained 50% of the shared variance between these two constructs.

In another study, Chris (2003) investigated current classroom assessment practices by surveying teachers in New Zealand at Years 5, 7, and 9 on the assessments they use in the areas of English and mathematics, the purposes of the assessment, and the assessments that provide the most useful information. In both English and mathematics, the use of teacher- or school-developed tools and strategies were greater than the use of externally developed tools. The only externally developed tools to have high rates of use across all years were the Progressive Achievement Tests and Competition tests. In both subject areas, teachers in classes 1-3 schools used competition tests significantly less. In both subject areas, assessment was used most frequently for classroom purposes. Less use of assessment was done for purposes outside the classroom, but when used, it came more often from externally developed tools. The greatest number of tools and strategies that were rated as "useful" or "very useful" by more than 50% were for teaching and learning and monitoring progress.

Garrison (2004) considered how the instructional strategies of public school teachers interact with the achievement levels of their students. Slightly more than 1,000 teachers in schools, broadly representative of public schools in the USA, responded to a school climate survey. Analyses revealed interesting "uncommonalities" in instructional emphasis, in number as well as kind. Instruction in low achieving classrooms generally was less coordinated than in classes of average achieving students. Instructional strategies and lesson focus in classes of high achieving students were linked in ways that resulted in more continuity and greater productivity.

Using survey data from 191 primary school teachers from Gaborone district in Botswana, and 300 similar teachers from Delta State in Nigeria, Nenty, et al. (2007), found out that there is a significant discrepancy between the level to which, in the perception of the teachers, each of Bloom's level of cognitive behaviour enhances quality of education and the level to which their classroom assessment practices are able to provide for the development of such behaviour among learners.

## **METHODOLOGY**

The study used an inferential survey design in which a validated questionnaire was used to gather and analyze the views and perceptions of a random sample of 146 primary and 102 high school teachers at Qacha's Nek district in Lesotho. These were with regard to the influence training in assessment has on the availability of skill to carry out effective classroom practices that sustain standards in educational assessment and hence enhance quality of education. The study involved the use of a face validated six-option Likert-type questionnaire with two sets of items consisting of: (a) a list of assessment skills to which teachers were required to indicate the level to which they possess each of them; and (b) a list of classroom assessment practices, which teachers were expected to indicate the frequency to which they applied each of them. A Cronbach alpha analysis gave the alpha coefficient of the instrument as .772 and .764 respectively for the two parts of the instrument. A composite of the number of assessment-related courses taken, and seminars and workshops attended was developed to operationalize each teacher's level of assessment training. Based on this, 137 of them were found not to have any training in assessment at all, while 73 had a little training and 35 had some training in assessment.

## **Data Analysis and Interpretation of Results**

Using SPSS data analysis package, a population t-test was done to test the first hypothesis, Pearson correlation analysis (see Table 2) was done to test the second while one way analysis of variance (ANOVA) was done to test the third and fourth (see Table 3). A population t-test was done to determine if teachers in Qacha's Nek possess each of the assessment skills to a significant level. The results presented in Table 1 reveal that to a significant extent, teachers at Qacha's Nek lack the assessment skills to: construct and develop good test items ( $t_{(244)} = -7.322$ ,  $p < .05$ ), conduct item analysis ( $t_{(247)} = -9.837$ ,  $p < .05$ ), and perform test validation ( $t_{(246)} = -7.682$ ,  $p < .05$ ). On the other hand, they possess to a significant level the skill to use cognitive levels of Bloom's taxonomy ( $t_{(244)} = 8.174$ ,  $p < .05$ ) in their test construction endeavour and to carry out formative assessment ( $t_{(244)} = 13.968$ ,  $p < .05$ ). Except for possessing the skill to utilize Bloom taxonomy in testing, teachers at Qacha's Nek district do not possess any assessment skills to a significant level. Generally, they perceive themselves as lacking, to a significant level, the assessment skills necessary for the execution of the classroom assessment methods. Teachers at Qacha's Nek district do not possess to a significant level, assessment skills in the following areas:

1. Test development
2. Item analysis
3. Cognitive levels of Bloom's taxonomy
4. Test validation and reliability
5. Formative assessment.

Table 1: Population t-Test for the Significance of the Level of Possession and Level of Use of Assessment Skills by Teachers at Qacha's Nek (n = 248)

Variable	M	X	S <sub>x</sub>	df	t-value	p<
1. Possession of skill in test development	15.00	12.33	5.72	244	-7.32	.000
2. Possession of skill in item analysis	5.00	3.58	2.29	247	-9.39	.000
3. Possession of skill to utilize Bloom taxonomy in test construction	15.00	17.79	5.34	244	8.17	.000
4. Possession of skill to validate test	7.50	4.45	4.20	246	-7.68	.000
5. Possession of skill to carrying formative assessment	12.50	15.70	3.58	244	13.97	.000
6. Utilization of test developing skill	15.00	10.40	4.92	245	-14.38	.000
7. Utilization of item analysis skill	5.00	2.89	2.24	247	-14.92	.000
8. Utilization of skill of writing items to measure each level of Bloom taxonomy	15.00	16.39	3.86	246	5.66	.000
9. Utilization of test validation skill	7.50	4.35	3.27	246	-15.14	.000
10. Utilization of formative assessment skill	12.50	13.56	3.58	246	4.66	.000

Similar trend in findings was observed for regularity of utilization of these skills in the classrooms. A population t-test analysis done to test these showed that there is significance in the regularity with which teachers use or do not use these classroom assessment practices. In other words as reflected in Table 1, the teachers, to a significant level, regularly utilize Bloom taxonomy in test construction and carrying out formative assessment. On the other hand, there is significantly regular non-utilization of the skills to construct and develop good test items, conduct item analysis, and perform test validation as classroom assessment practices by secondary school teachers in Qacha's Nek district of Lesotho. The results mean that, to a significant extent, teachers do not regularly use these classroom assessment practices.

To test the third null hypothesis, a Pearson bivariate correlation analysis was done (see Table 2) to determine the degree of relationship between the level of possession of assessment skills and the regularity of use of such skills during classroom assessment practices. The results led to a non rejection of the research hypothesis that there is a significant relationship between the level of possession of assessment skills and the regularity of use of classroom assessment practices. They revealed that all the practices significantly depend on the level of possession of the relevant skills. Hence the lack of exhibition of these practices is as a result of the actual lack of possession of such assessment skills.

Given the Pearson product moment correlation between the level of possession and the regularity of utilization of these skills, an attempt was made to determine the probability of utilizing each of these skills by teachers in Qacha's Nek district of Lesotho in assessment practices. The possession of the skill to develop test items relates  $r = .498$  ( $p < .01$ ,  $df = 246$ ), and hence accounts for 25% of the variability in utilizing this skill in classroom assessment practices. Similarly, the possession of skill to perform item analysis ( $r = .702$ ,  $p < .01$ ) determines 49% of the ability to exhibit this

skill in teachers' classroom assessment practices. An r-value of .699 indicates that 45% of the variability in test validation as carried out by teachers is accounted for by the level to which they possess the relevant skill. Similarly, the relationship between possession of the skill to, and actual carrying out formative assessment was observed to be  $r = .311$  ( $p < .01$ ) and hence the former accounted for about 10% of the later. Finally using Bloom taxonomy, possession and utilization of assessment skill on this related  $r = .301$  ( $p < .01$ ), hence the level of possession of this skill was found to account for about 9% of the level of utilization of such skill. In general, among teachers in Qacha'a Nek district of Lesotho, the level of possession of each skill accounted significantly for the likelihood of utilization of such skill by teachers in classroom assessment.

These results mean that teachers often use those classroom assessment skills which they possess. Hence it is those practices which they perceive to have the skill to carry out that they actually carry out. For instance, if they believe their level of possession of skill to develop and construct test items is very high, then they will always develop and construct test items for their classrooms, otherwise they copy items from previous examinations. However, if their level of possession of skills is low, they would definitely avoid using such practices in their classrooms. Generally the level to which teachers in Qacha'a Nek utilize the different assessment skills in their classrooms is directly and significantly related to the level to which they possess such skills.

To test the final hypothesis, a one-way analysis of variance was done. This analyzed the variability in the level of availability and utility of important assessment skills across teachers with different level of training on assessment (see Table 3). Results reflect that the perception of teachers about their ability to execute some assessment tasks significantly ( $p < .05$ ) depends on their level of training. This was shown on three out of five selected assessment skills of teachers namely; ability to develop tests, perform test validation and carry out formative assessment. Teachers with the highest level of training had a significantly higher mean on the perception of teachers' ability to develop and construct test items and perform test validation. This means that they perceive that they possess the assessment skills in these two areas significantly more than those without assessment training, while those with the lowest level of training had a significantly higher mean on carrying out formative assessment. With regard to the utilization of the classroom assessment

Table 2: Inter-correlation Matrix between the Level of Possession of Skill and the Level of Classroom Assessment Practice (n = 248)

Variables	1 <sup>a</sup>	2	3	4	5	6	7	8	9	10
Possession of skill to develop test item	1	.568**	.564**	.238**	.469**	.498**	.557**	.473**	.216**	.213**
Possession of skill to perform item analysis	.568**	1	.579**	.113	.446**	.515**	.702**	.502**	.105	.344**
Possession of skill to carrying out test validation	.564**	.579**	1	.158*	.448**	.441**	.643**	.669**	.126*	.220**
Possession of skill to carry out formative assessment	.238**	.113	.158*	1	.327**	.077	-.022	.018	.311**	.063
Possession of skill to use Bloom's taxonomy in testing	.469**	.446**	.448**	.327**	1	.148*	.338**	.259**	.174**	.301**
Utilization of test developing skill	.498**	.515**	.441**	.077	.148*	1	.724**	.615**	.336**	.406**
Utilization of item analysis skill	.557**	.702**	.643**	-.022	.338**	.724**	1	.688**	.199**	.431**
Utilization of test validation skill	.473**	.502**	.669**	.018	.259**	.615**	.688**	1	.196**	.298**
Utilization of skill to use Bloom taxonomy in testing	.216**	.105	.126*	.311**	.174**	.336**	.199**	.196**	1	.295**
Utilization of formative assessment skill	.213**	.344**	.220**	.063	.301**	.406**	.431**	.298**	.295**	1

\*\*Correlation is significant at the 0.01 level (2-tailed).

\*Correlation is significant at the 0.05 level (2-tailed).

<sup>a</sup> Variables are numbered as named in the first column

Table 3: Analysis (ANOVA) of the Influence of Training on Possession and Regularity of Utilization of Assessment Skill in Classroom Practices Among Teachers in Lesotho (n = 248)

Variable	Teachers level of Training in Assessment	n	Mea n	Std. Dev.	Std. Error	Source of Variation	SS	df	MS	F	Sig.
Level of Possession of Test Development Skill	No	137	12.82	5.32	.454	<b>Between Groups</b>	447.29	2	223.6	7.20*	.001
	Little	72	10.29	5.38	.634	<b>Within Groups</b>	7422.83	239	31.06		
	Some	34	14.21	6.90	1.202	<b>Total</b>	7870.12	241			
	Total	243	12.26	5.71	.367						
Level of Possession of Skill To Conduct Item analysis	No	137	3.58	2.13	.182	<b>Between Groups</b>	27.69	2	13.85	2.70	.069
	Little	73	3.18	2.28	.266	<b>Within Groups</b>	1240.82	242	5.13		
	Some	35	4.26	2.72	.459	<b>Total</b>	1268.51	244			
	Total	245	3.56	2.28	.146						
Level of Possession of Skill to Utilize Bloom Taxonomy	No	137	18.12	3.57	.305	<b>Between Groups</b>	59.991	2	29.99	1.045	.353
	Little	72	17.00	7.83	.922	<b>Within Groups</b>	6859.133	239	28.699		
	Some	33	17.85	4.93	.858	<b>Total</b>	6919.124	241			
	Total	242	17.75	5.36	.344						
Level of Possession of Skill to Carry out Test Validation	No	136	5.41	3.69	.316	<b>Between Groups</b>	182.69	2	91.34	5.33*	.005
	Little	73	4.51	3.49	.408	<b>Within Groups</b>	4128.33	241	17.13		
	Some	35	7.29	6.45	1.091	<b>Total</b>	4311.02	243			
	Total	244	5.41	4.21	.270						
Level of Possession of Skill to	No	137	16.29	3.63	.310	<b>Between Groups</b>	188.82	2	94.41	7.80*	.001
	Little	72	14.31	3.27	.385	<b>Within</b>	2892.33	239	12.10		

						<b>Groups</b>					
	Some	35	15.91	3.29	.573	<b>Total</b>	3081.15	241			
	Total	244	15.65	3.58	.230						
<b>Regularity of Utilization of Test Development Skill</b>	No	137	10.93	4.41	.377	<b>Between Groups</b>	114.23	2	57.12	2.40	.093
	Little	72	9.38	5.07	.597	<b>Within Groups</b>	5702.62	240	23.76		
	Some	34	10.53	6.11	1.047	<b>Total</b>	5816.85	242			
	Total	243	10.41	4.90	.315						
<b>Regularity of Utilization of Skill To Conduct Item analysis</b>	No	137	2.66	2.08	.178	<b>Between Groups</b>	35.04	2	17.52	3.57*	.030
	Little	73	2.79	2.36	.277	<b>Within Groups</b>	1188.97	242	4.91		
	Some	35	3.77	2.41	.408	<b>Total</b>	1224.00	244			
	Total	245	2.86	2.24	.143						
<b>Regularity of Exhibition of Skill to Utilize Bloom Taxonomy</b>	No	137	16.53	3.82	.327	<b>Between Groups</b>	49.10	2	24.55	1.66	.192
	Little	73	16.51	3.84	.450	<b>Within Groups</b>	3549.87	240	14.79		
	Some	33	15.21	3.94	.686	<b>Total</b>	3598.96	242			
	Total	243	16.35	3.86	.247						
<b>Regularity of Utilization of Skill to Carry</b>	No	137	4.13	2.95	.252	<b>Between Groups</b>	22.09	2	11.05	1.06	.350
	Little	73	4.26	3.62	.424	<b>Within Groups</b>	2524.66	241	10.48		
	Some	34	5.03	3.47	.595	<b>Total</b>	2546.75	243			
	Total	244	4.30	3.24	.207						
<b>Regularity of Utilization of Skill to Conduct Formative</b>	No	137	13.81	3.56	.304	<b>Between Groups</b>	111.41	2	55.70	4.46*	.013
	Little	72	13.82	3.60	.423	<b>Within Groups</b>	3009.26	241	12.49		
	Some	35	11.89	3.29	.556	<b>Total</b>	3120.67	243			



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Total	244	13.54	3.58	.230
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\* Significant at .05

practices, the same table reveals that, teachers with different level of assessment training differed significantly ( $p < .05$ ) in the utilization of only two classroom assessment practices, that is, conducting item analysis and carrying out formative assessment. Teachers did not differ significantly when it came to constructing and developing test items, conducting item analysis and using the cognitive levels of Bloom's taxonomy.

## DISCUSSION, CONCLUSION AND RECOMMENDATIONS

Firstly, the study found that generally teachers in primary and secondary school classrooms in Qacha's Nek district of Lesotho do not possess to a significant level some basic assessment skills and hence cannot utilize them in their classroom practices. To a significant extent, the level to which they possess relevant assessment skills was found to influence the level to which they utilize such skills in the classrooms. Hence, generally teachers in primary and secondary school classrooms in Qacha'a Nek district of Lesotho, do not possess, and therefore cannot utilize some essential classroom assessment skills. Finally, it was found that the level of training in assessment influences the level to which the teachers possess and utilize some essential assessment skills in their classroom practices.

Classroom assessment is a 'prime mover' of learning, and according to AFT, NCME and NEA (1990), good teaching cannot exist without good assessment, but most teachers in African schools are not trained even in the basic skills of classroom assessment. To Nenty (1997) "many persons are certified to teach with little or no training on basic assessment skills. Some teachers' training institutions do not offer courses that impart such skills at all, while some make such courses optional as if assessment is an optional duty of the classroom teacher" (p. 56). This is supported by some of the findings of this study. The consequences of this are that teachers are deprived of the skill with which to create and maintain a conducive classroom environment within which learners would want and like to learn (Nenty, 2007). Consequently, there is no efficient use of assessment to ensure effective teaching and learning in African classrooms. This is the situation in classrooms in Qacha'a Nek district of Lesotho where, to a significant level, teachers generally do not possess and hence cannot utilize essential classroom assessment skills. This does not augur well for learning in such classrooms.

There are a number of reasons why Qacha's Nek teachers do not possess assessment skills. One of the most significant of these is the quality of teacher training undertaken by the colleges of education in Lesotho. With only two training colleges in the country, the classes are overcrowded and teachers do not spend enough time with the trainees to make sufficient impact on learning and skill development especially in general subject area like assessment. According to Fred (1991), the poor quality of those joining the teaching service results from lack of observable impact of pre-service training in teachers' classroom assessment. Furthermore, this may result from the effect of perceived misalignment between what is taught in terms of assessment skills and techniques, and what teachers actually practice in the schools (Farr & Griffin, 1973; Gullickson, 1986). According to Chapman and Snyder (1991), until recently in many African countries, primary teacher's training was an option pursued mostly by primary school graduates who did not have adequate credentials to continue to secondary schooling. Given the low salaries and unfavorable teacher assignment policies, those going into teaching were often students who lacked skills that would secure them a job in the private sector or a better paying government position (p. 3).

This finding is not unlike those of others cited earlier in the literature review section. For instance, Kauffman et al. (2002) found that despite the state's development of standards and statewide assessments, the new teachers were without assessment skills and received little or no guidance about what to teach or how to teach it. Left to their own devices, they struggled day to day to prepare content and materials. This low quality of teachers' training in classroom assessment is of great concern, because competence in classroom assessment has been identified as being significant to successful teaching and assessment constitutes a large part of teachers' professional activities (Stiggins, 1997).

Moreover, the theory of validity postulates that the assessment should not be too narrow and hence fail to include important dimensions of the construct. On the other hand it should also avoid being too broad, thereby containing excess reliable variance associated with other distinct constructs as well as method variance such as response sets or guessing propensities that affects responses in a manner irrelevant to the interpreted construct. This validity concerns call for teachers who are well skilled in measurement concepts, that is, teachers who possess assessment skills to a significant level. This is because, without such ability, teachers will always find themselves engaged in assessments that under-represent or over-represents the focal construct while simultaneously contaminating the scores with construct-irrelevant variance.

The significant relationships between levels of possession and of utilization of some basic assessment skills were not unexpected. In each case, the level to which relevant skill is possessed accounts for a sizeable and significant proportion of the variability in the level to which such skill is utilized. In other words, utilization of any skill depends on the extent to which such skills are in ones mental custody. In the absence of such skills, practices become a quack. Standard in assessment cannot be ensured, let alone, maintained through professionally quack practices, hence the low standard and lack of assessment-related effectiveness in African education.

In the perception of teachers at Qacha's Nek district, the regularity of use of assessment practices in the areas of test development, item analysis, test validation, estimation of reliability and formative application of testing results significantly depend on the level of possession of assessment skills in those areas. Thus, teachers who indicated a high level of possession of assessment skill also reported a regular deployment of such assessment skills through relevant practices in their classrooms. While those who were shown to have low level of assessment skill also reported that they do not employ such practices regularly in their classrooms. This is not surprising because teachers, who believe to possess little or no assessment skills, feel very incompetent to use relevant assessment procedures of which they are not skilled in. In this situation, they opt to remain in the comfort zone that is, avoiding the employment of some of the new and efficient assessment practices which could improve their classroom situations. For all the five skills considered here, level of possession of such skill was found to account for a significant proportion of the level to which such skill was utilized in the classroom. This finding supports that of Zhang and Burry-Stock (2003) who in their study found the overlap between assessment practices and self-perceived assessment skills to be reflected by a Pearson product-moment correlation coefficient of .71. This was interpreted to explain 50% of the shared variance between these two constructs. This therefore shows that the relationship between classroom assessment practices and teachers' assessment skills is evident in the existing literature on classroom assessment.

Teachers with different levels of assessment training were found to differ significantly in their perception regarding their possession of assessment skills. This is not intriguing as the efficacy and value of training should be reflected in the teacher's confidence in their ability to engage in assessment related activities. Again, teachers with little or no assessment training are less likely to feel confident and to see themselves as having the assessment skills. It is this confidence that drives the teachers into the habit of using different classroom assessment methods.

Surprisingly, with regard to teachers' utilization of assessment practices, those with differing levels of assessment training differed significantly in the practice of item analysis and carrying out formative assessment, but did not differ significantly with regard to other practices. This can be explained by a number of factors. One of the reasons can be the fact that teachers who have some training in assessment tend to be ostentatious about the knowledge they think they possess and as a result, they end up disregarding some of the important concepts they have learnt. The quality of training acquired by those teachers who claimed that they are trained in assessment might not be such that would make a significant difference in their everyday classroom assessment practices when compared to those who never went through such training.

To a significant level, due to lack of relevant skills, teachers at Qacha 's Nek district do not use assessment practices like developing and constructing tests, conducting item analysis, conducting test validation and estimating reliability, writing items to measure the cognitive levels of Bloom's taxonomy. Also, they do not carry out formative application of testing results regularly in their classrooms. These findings are consistent with one of the findings of Ohlsen (2007), who stated that "student-centered assessment strategies are used very little if at all by between forty and fifty percent of the teachers. This lack of use of assessment practices stems from a number of factors. One of the significant factors is that most teachers are not skilled in measurement concepts and practices. Teachers are without the skills necessary for the execution of proper assessment practices, as a result, they remain hesitant to use assessment strategies of which they lack the confidence to implement a fair assessment of student performance" (Ohlsen, 2007). Therefore, in a situation like this, teachers fall back to assessment practices that were used when they were students or those used by their cooperating teachers. As a result, they find it more a comfortable and natural reaction to stay within the comfort zone of traditional testing models. Teachers without adequate training in assessment do not understand the place of assessment in learning and because they lack the skill to develop and validate assessment instruments, they readily fall back on items used in previous examinations for their classroom assessment purposes.

Another important explanation given by Chapman and Snyder (1991) is that low quality of work life impedes the quality of teachers' performance, reduces teachers' openness to innovation, and increases teacher attrition. This is in fact true, and it is a worse situation in rural districts of the country. Environments in which untrained staff operates are

alarmingly very poor. There is a complete lack of relevant facilities, resources and funds to support test revision and printing of tests. Teachers actually go out of their way to provide some basic facilities to enable their students learn. As a result, in situations like this, teachers cannot be expected to use effective assessment practices regularly in their classroom. This relationship also alerts us on the issue of content validity. The theory on this postulates that validity reflects how well the quality and quantity of course content (together with intended behavioral outcomes) have been specified, sampled and transformed into test items. This means that a content- valid test is the one that its items are a good representative of the entire course content, taking adequate consideration of the relative importance of the different sections, topics and cognitive skills implied in the syllabus. However, when the positive relationship between teachers' assessment skills and classroom assessment practices is not maximized, it will always be difficult for teachers to engage themselves in regular use of valid assessment practices.

If we want to stop paying lip service to standard in classroom assessment and hence to the quality of education in our schools, Lesotho government should ensure that all our classroom teachers have adequate training on assessment. Given the all important role assessment serves in teaching and learning, facilities and resources should be provided for the two teachers' training institutions in the country in order that they may do a better job at training teachers, especially in equipping trainee-teachers with relevant skills in assessment.

## REFERENCES

- AFT, NCME, & NEA (1990). Standards for teacher competence in educational assessment of students. *Educational Measurement Issues and Practice*, 9(4), 30-32.
- Ansell, N. (2002). Secondary education reform in Lesotho and Zimbabwe and the needs of rural girls: Pronouncements, policy and practice. *Comparative Education*, 38(1), 91-112
- Black, P., & Wiliam, D. (1998). Inside the black box: Raising standards through classroom assessment. *Phi Delta Kappan*, 80,139-149.
- Bloom, B., Englehart, M. Furst, E., Hill, W., & Krathwohl, D. (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain*. New York, Toronto: Longmans, Green
- Chapman, D., & Snyder. C. (1991). *Is training association with teachers' classroom behaviour? A study of Botswana Junior Secondary School Teachers*. New York: United States Agency for International Development.
- Chris, M. (2003). *Classroom assessment practices in English and mathematics*. Strafford: Marston
- Embretson, S. (1983). Construct validity: Construct representation vs. nomothetic span. *Psychological Bulletin*, 93, 179-183.
- Farr, R., & Griffin, M. (1973). Measurement gaps in teacher education. *J. Res. Deve. Educ*, 7(1), 19-28.
- Forehand, M. (2005). Bloom's taxonomy: Original and revised. In M. Orey (Ed.), *Emerging perspectives on learning, teaching, and technology*. Retrieved from <http://projects.coe.uga.edu/epltt/>
- Fred, S. (1991). Schooling without learning: Thirty years of cheating in high school. *Adolescence*, 26 (104), 840.
- Garrison, W. (2004). Profiles of classroom practices in U.S. public schools. *School Effectiveness and School Improvement*, 15(3), 377-406
- Grimes, T. V. (2010). *Interpreting the meaning of grades: A descriptive analysis of middle school teachers' assessment and grading practices*. Unpublished doctoral dissertation, Virginia Commonwealth University, Virginia.
- Gullickson, A. R. (1986). Teacher education and teacher-perceived needs in educational measurement and evaluation. *J. Educ. Measurement*, 23(4), 347-354.
- Hills, J. R. (1991). Apathy concerning grading and testing. *Phi Delta Kappa*, 72(7), 540-545
- Houghton, R. S. (2004, March 17). The basic idea: Bloom's taxonomy – overview. *Communities Resolving Our Problems (CROP)*: Retrieved from <http://www.ceap.wcu.edu/houghton/Learner/think/bloomsTaxonomy.html>
- Kauffman, D., Moore, J., Kardos, S., Liu, E., & Peske, H. (2002). "Lost at sea": New teachers' experiences with curriculum and assessment. *Teachers College Record*, 104(2), 273- 300.
- Mertler, C. A. (2003). *Pre service versus inservice teachers' assessment literacy: Does classroom experience make a difference?* Unpublished doctoral dissertation, Bowling Green State University, Bowling Green, Ohio
- Ministry of Education, Kingdom of Lesotho. (1992). *Educational sector development plan*. Maseru, Lesotho: GOL
- Nenty, H. J. (2007). Tackling assessment-related obstacles to education for all (EFA) and the realization of millennium development goals (MDGs) in African countries. A paper prepared for presentation at 2007 12<sup>th</sup> Biennial

- BOLESWANA International Symposium on Educational Research, National university of Lesotho, 23<sup>rd</sup> to 25<sup>th</sup> July, 2007. *Global Journal of Educational Research*, 6(1&2), 29-34.
- Nenty, H. J. (1997). Assessment as a means of enhancing improved quality of life through education. In C. Magagula, E. Mazibuko, & S. Zwane (Eds.). *Educational research for quality of life*. Retrieved from <http://boleswa97.tripod.com/index.htm>
- Nenty, H. J. (1985). *Fundamentals of measurement and evaluation in education*. Unpublished Monograph, University of Calabar, Calabar, Nigeria
- Nenty, H. J., Adedoyin, O. O., Odili, J. N., Major, T. E. (2007). Primary teacher's perceptions of classroom assessment practices as means of providing quality primary/basic education by Botswana and Nigeria. *Educational Research and Review*, 2(3). 74-81.
- Ohlsen, M. (2007). Classroom assessment practices of secondary school members of NCTM. *American Secondary Education*, 36(1), 4-16
- Oz-TeacherNet. (2001). Oz-TeacherNet: Teachers helping teachers: Revised Bloom's taxonomy. Retrieved from <http://rite.ed.qut.edu.au/oz-teacherNet/index.php?module=ContentExpress&func=display&ceid=29>
- Stiggins, R. (1997). *Students centered classroom assessment*. Trenton, New Jersey: Merrill Upper Adda River
- Stiggins, R. (1991). Relevant classroom assessment training for teachers. *Educational Measurement: Issues and Practices*, 1, 7-12
- Vandeyar, S., & Killen, R. (2007). Educators' conceptions and practice of classroom assessment in post-apartheid South Africa. *South African Journal of Education*, 27(1), 101–115.
- Zhang, Z., & Burry-Stock, J.A. (2003). Classroom assessment practices and teachers' self-perceived assessment skills. *Applied Measurement in Education*, 16(4), 323-342.



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