

Original Research Article

Teachers' knowledge and practices of Classroom Assessment in the Ellembelle District of Ghana

This research is self-funded

The authors confirm there are no conflict of interest involve with any parties in this research study

ABSTRACT

Introduction: Classroom assessment issues are increasingly becoming the interest of stakeholders and scholars of education. The purpose of this study was to ascertain the knowledge level and practice of teachers on classroom assessment in the Ellembelle District. Specifically, it sought to determine the knowledge level of teachers in the Ellembelle District in classroom assessment and the practice of teachers in the Ellembelle District in classroom assessment.

Methodology: Simple random sampling and purposive sampling were employed to select 207 participants for the study. The study made use of the descriptive research design. Questionnaire was used as the main data collection instrument.

Results and Findings: Data was analyzed with descriptive statistics. The study found that teachers were very knowledgeable about classroom assessment and have positive classroom assessment practices.

Conclusion and recommendation: Based on the findings, it was recommended that Ghana Education Service should make sure class sizes in the district are reduced, involve peer assessment, conduct in-service training, self-assessment and performances assessment so as to enhance effective classroom assessment.

Keywords: classroom assessment, assessment practices, assessment knowledge

INTRODUCTION

“Assessment is at the heart of effective teaching and learning in the Ghanaian schools. Without assessment, teachers are not able to identify the gap between what was taught and what is actually being learnt. Assessments are created, administered and analysed by teachers

themselves on questions that are important to them. Teachers are expected to be literate and capable of constructing valid and reliable assessment instruments in order to inform the instructional process. Despite these expectations, limits in teachers' assessment knowledge and training are well documented" (Bookhart 2001; Campbell 2000; Melter & Campbell 2006). Hill (2000) reported that "teachers experienced difficulty in designing school systems assessment, in which assessment was used mainly for improving learning through focused teaching rather than where summative reporting dominated."

The study by Quagrain (1992) in the Western Region of Ghana revealed that some teachers had limited skills for classroom assessment. According to Stiggins (as cited in Agu, et al, 2013), "a number of possible reasons could be deduced for such deficiency. It may be either that the teachers' pre-service training did not prepare them adequately for classroom assessment due to little emphasis on assessment during their professional development or that most of the teachers failed to acquire classroom assessment skills needed for quality test item generations while in training."

"Previous research indicated lack of skills and competency in tutors' knowledge in assessment practices in the teacher training colleges (Amedahe, 2002; Etsey, 2012). It therefore seems to be possible that teachers at the basic school level might adversely be affected by the inadequate competencies of teachers who are supposed to give them training in testing practices at the training colleges of education."

Research Objectives

The main objective of the study is to ascertain the knowledge level and practice of teachers in classroom assessment in the Ellebelle District. Specifically, the study seeks to address the following objectives:

1. The knowledge level of teachers in the Ellebelle District in classroom assessment
2. The practice of teachers in the Ellebelle District in classroom assessment

LITERATURE REVIEW

Assessment knowledge of teachers

According to Calderhead (1996), "the effectiveness of classroom assessment depends on teachers' attitudes, competence, knowledge, and practices due to the continual interaction between teachers and students. Teachers are required to develop classroom assessment that aligns with practices recommended by experts of educational assessment. However, findings

from studies of classroom assessment practices have consistently expressed a concern about the adequacy of teachers' assessment practices" (McMillan & Lawson, 2001; Zhang & Burry-Stock, 2003). "These studies have showed that there are some contradictions between teachers' practices and recommendations of educational assessment experts regarding issues of classroom assessment. This lack of agreement between teachers' practices and experts' suggestions has been attributed to teachers' knowledge and attitudes about educational assessment" (Siegel & Wissehr, 2011).

McMillan and Lawson, (2001) explored "attitudes, competence, knowledge, and practices of teachers about educational assessment. Participants were 165 in-service teachers teaching various subject areas in grades 5 to 10 randomly selected from Muscat educational governorate in the Sultanate of Oman. The study employed a descriptive survey research design. Results revealed that although teachers held a favourable attitude towards and perceived themselves as being competent in educational assessment, they demonstrated a low level of knowledge in educational assessment. Teachers used a variety of assessments in the classroom primarily for assigning grades and motivating students to learn, with some variations by gender, grade level, and subject area. Teaching load and teaching experience accounted for some of the variations in teachers' educational assessment practices."

Plake and Impara (1992) surveyed assessment knowledge of 555 in-service teachers, who selected using simple random sample technique, in the United States using an instrument titled the "Teacher Assessment Knowledge Questionnaire (TALQ)" consisting of 35 items based on the "Standards for Teacher Competence in the Educational Assessment" (AFT, NCME, & NEA, 1990). A descriptive design and questionnaire were used for the study. The results indicated that the teachers were not well prepared to assess student learning as revealed by the average score of 23 out of 35 items correct, and as such teachers' assessment knowledge should deserve further recognition and investigation. "In his discussion of the assessment knowledge, Popham (2006) touted about the need for a continuous in-service assessment training aligned with the classroom assessment realities. The position of Popham is not far from reality as continuous in-service assessment training is necessary to keep teachers abreast with current trends of assessment and to keep up with the knowledge and skills acquired in the course of their schooling."

"In a survey of assessment knowledge of 69 teacher candidates, who were selected randomly and questionnaire administered to them, Volante and Fazio (2007) found that the self-

described levels of assessment knowledge remained relatively low for the candidates across the four years of the teacher education programme,” and hence agreed with Popham's (2006) assertion about the need for in-service assessment training to ensure an acceptable level of assessment knowledge for teachers. Along similar lines, Wolfe, Viger, Jarvinen, and Linkman (2007) proposed that teachers' self-perceived competence in assessment should be a vital component in the professional development of in-service teachers.

In a survey by DeLuca and Klinger (2010), 288 teacher candidates enrolled in a teacher education program in Canada were sampled using simple random sampling procedure. A questionnaire was administered to them using quasi-experimental research design. It was found that teacher candidates who elected to enrol in an educational assessment course had higher levels of confidence in educational assessment knowledge and skills than those who did not have formal instruction in assessment. “Likewise, in a study of assessment knowledge, skills, and attitudes of 217 in-service teachers in Oman, selected by simple random and using quasi-experimental design with questionnaire as the research instrument, Alkharusi, Kazem, and Al-Musawai (2011) found that teachers who had a pre-service course in educational assessment demonstrated on average a higher level of educational assessment knowledge than those who did not have a pre-service assessment course.”

Amoako, Asamoah and Bortey (2019) conducted “a study to investigate Senior High School (SHS) teachers' knowledge of formative assessment in Ghana. Descriptive cross-sectional survey was the design employed for the study. Census approach was used to involve 148 Mathematics teachers in all the thirteen public SHS in the Cape Coast metropolis in Ghana. Questionnaire with close-ended items was developed for the data collection. It was revealed that majority of SHS mathematics teachers in the Cape Coast Metropolis had low knowledge in formative assessment practices.”

Moe (2012) conducted “a study to determine what one large scale teacher education program situated in a large public university did to advance the skills of assessment knowledge among its elementary pre-service teachers. The focus was on the perceived exposure and attained knowledge levels of pre-service teachers on assessment topics. The perceived levels of exposure and knowledge were compared to the beliefs that elementary principals held on the importance of the same assessment topics. Surveys were given to student teachers and principals in a way that allowed the information to be compared. The analysis of the survey results found that the

exposure levels reported by the pre-service teachers was lower than the importance levels placed on the respective topics by the principals. However, the pre-service teachers reported higher levels of knowledge on key assessment topics than the levels of knowledge that principals believed beginning teachers should possess on respective assessment topics.”

In the study of Etsey and Abu (2013) to determine colleges of education tutors’ capacity in general test and administration in northern Ghana, 288 tutors from six colleges of education were selected for the study. A cross-sectional descriptive survey was used with questionnaire as the main research instrument. It was found out that the college tutors showed low capacity in general on test construction and administration.

It is believed that lack of knowledge or insufficient knowledge regarding classroom assessment pose a major challenge in assessment in the daily academic activities of pre-service teachers. In a study conducted in Turkey with 90 teachers by Metin (2013) using simple random sampling technique, it was revealed that teachers had insufficient knowledge about how rubric can be prepared and cannot find rubrics related to task topics. The study further revealed that teachers had not prepared the performance task themselves but made use of the previously designed performance tasks.

How Teachers Practice Classroom Assessment

Teachers’ ability to accurately assess student achievement is dependent on their educational, professional, and personal backgrounds. These variations may be associated with differences in teaching experience (Leinhardt, 1983) or with differences in content area or pedagogical professional development (Rodriguez, 2004).

Vingsle (2014) conducted a study to identify activities and characterize the knowledge and skills that a teacher of mathematics uses in her formative assessment practice during whole-class lessons. The study was a case study of a teacher’s formative assessment practice during mathematics lessons in Year 5. The data were analysed by identifying a) the formative assessment practice b) the teacher’s activities during the formative assessment practice and c) the teacher knowledge and skills used during the activities. The main result of the study showed that the formative assessment practice is a very complex, demanding and difficult task for the teacher in several ways. For example, during short term minute-by-minute formative assessment practice the teacher used knowledge and skills in eliciting, interpreting and using the elicited information to modify instruction to better meet student learning needs. The teacher also helped students to

engage in common learning activities and take co-responsibility of their learning. In the minute-by-minute formative assessment practice the teacher also handled new mathematics, unpredictable situations and makes decisions about teaching and learning situations in a matter of seconds.

Susuwele-Banda(2005) investigated teachers' perceptions of classroom assessment in Mathematics and their current classroom assessments practices. Specifically, the study sought to gain an understanding of the extent to which teachers use different classroom assessment methods and tools to understand and to support both the learning and teaching processes. The study used a questionnaire to establish the teachers' perceptions of classroom assessment in mathematics, a lesson observation protocol, and pre-lesson and post-lesson observation interview protocols as main sources of data collection. The data collected through observations and interviews helped to map out patterns between perceptions of classroom assessment and the teachers' classroom assessment practices. Document analysis was used to triangulate the information collected through observations and interviews. In addition, document analysis was used to provide first-hand information on the kind of written feedback students get and the nature of activities they do. A total of six teachers (three male and three female) were drawn from two primary schools in Malawi. The data suggested that teachers perceive classroom assessment as tests that teachers give to their students at specified time intervals. What teachers said about their teaching was not reflected during their teaching. Since teachers perceived classroom assessment as tests, they showed limited ability to use different methods and tools to assess their students while teaching. The teachers' perceptions of classroom assessment have influence on their classroom assessment practices. Five of the six teachers perceived assessment as testing, and classroom assessment practices were not clearly embedded in their teaching. Teacher experience and teacher education programs did not seem to contribute much to teachers' perceptions of classroom assessment. However, teacher's academic qualification seemed to influence teachers' flexibility to accept new ideas.

“In a study conducted by Kolozi-Keaikitse (2012), The Classroom Assessment Practices and Skills (CAPS) questionnaire was administered to a sample of 691 primary and secondary school teachers in Botswana, Southern Africa to survey their thoughts about classroom assessment and identify classroom assessment practices teachers perceive to be skilled and those that they used most. The study examined the discrepancies between teachers' perceived skill and

use of classroom assessment practices. Exploratory factor analysis generated four factors from “Thoughts about Assessment” and six factors for skill and use of classroom assessment practices.” Primary teachers, especially those with only a certificate, needed more skill training in assessment applications, statistical applications, and criteria referenced testing, according to the findings. The more experienced teachers were, the more they agreed with mastery and performance orientations, and the more expertise and usage of desired classroom assessment procedures they had perceived. Teachers' educational level, subject taught, teaching level, years of teaching experience, and assessment training were all factors. The findings revealed that integrating more assessment courses in teacher training and sending teachers to assessment in-service or workshops improved their perceptions, skills, and implementation of acceptable classroom assessment procedures.

METHODOLOGY

Descriptive research design was used for the study. In this study, the target population of the study consisted of all professional teachers in the Ellembele District who have taught for at least two years in all the eight educational circuits in the District Multistage Sampling of Simple random sampling and purposive sampling were employed to select 207 participants for the study. Questionnaire was used as the main data collection instrument. The questionnaire was administered to the selected teachers. The Cronbach's Coefficient Alpha as a measure of internal consistency was used to determine the reliability of the tried-out instrument. The reliability coefficient of the questionnaire was 0.79. Data was analyzed with descriptive statistics.

RESULTS AND FINDINGS

The main objective of this research question was to explore the knowledge level and the assessment practices of teachers of Ellembele District in classroom assessment. On a four-point, Likert-type scale (1 = strongly disagree, 2 = disagree, 3=agree, and 4 = strongly agree), teachers were asked to indicate their levels of agreement or disagreement with statements posed on the level of knowledge and the assessment practices in classroom assessment. The results were discussed using means and standard deviation. The total value of the scale is 10 (4 + 3 + 2 + 1). This gives a mean of 2.5 for each of the responses out of the total of 4. That is the total 10 divided by the 4 responses The 2.5 is also the middle point for the four-point scale. The difference of the minimum of 1 and 2.5 which gives 1.5 is divided into 2 making 0.75. Therefore,

the mean cut-off points for the questionnaire for the variables were: 3.25 – 4.00 = Strongly Agree, 3.24 – 2.50 = Agree, 2.49 – 1.75 = Disagree and 1.74 – 1 = Strongly Disagree. A mean of 2.50 and above indicates respondents' agreement while a mean of 2.49 and below indicates respondents' disagreement. The mean of the items was estimated by adding up all the responses to each item by each respondent and then dividing by number of respondents who responded to that particular item.

Research question one

Knowledge level of teachers of Ellembelle District in classroom assessment

The results of knowledge level of teachers in classroom assessment are presented in Table 1.

Table 1- *Teachers Level of Knowledge in classroom assessment*

	Statements	Mean	SD
1	Classroom assessment is about developing assessment methods in the classroom	2.95	0.702
2	Consider what to assess in students before the assessment begins	3.32	0.687
3	Classroom assessment is about analyzing assessment results	2.99	0.710
4	Ensure that the technique is the most effective in measuring the target	3.36	0.675
5	Classroom assessment is developing performance assessment in the class	3.18	0.627
6	Classroom assessment is developing valid grading procedures in the class	2.98	0.703
7	Use different technique to measure one target	3.36	0.653
8	Make the student interest the focus of assessment	3.01	0.779
9	Classroom assessment recognizes ethics of assessment in the class	3.05	0.605
10	Assessment requires appropriate methods for instructional decisions	3.34	0.618
11	Assessment is much of individual class participation.	3.10	0.776
12	Assessment is much of group class participation.	2.59	0.776
13	Individual hands-on activities are key in assessment.	3.05	0.732
14	Classroom assessment is mainly for promotions	2.25	0.911
15	Assessment may include group hands-on activities.	3.06	0.584
16	Assessment of individual class participation is a good practice	3.35	0.579
17	Assessment results are the basis for planning teaching	3.28	0.682
18	Matching performance tasks to instruction and course objectives ideal for a good assessment	3.10	0.611
19	Communicating performance assessment criteria to students in advance limit the success of the assessment	2.51	0.913

20	Sometimes it is not bad to assess based on issues outside the course objectives	2.64	0.768
21	Instructions play little role in the assessment	2.25	0.862
22	Using assessment results when developing curriculum	3.08	0.746
23	Assessment results are for evaluating class improvement	3.37	0.592
24	Assessment results are for evaluating school improvement	3.16	0.719
25	Use the assessment to make final decision on the students	2.87	0.942
26	Giving students areas to study for assessment is a bad practice	2.49	1.009
Means of Means		2.986	
Mean of standard deviation			0.729

Source: field study (2020) (N= 207)

Table 3 shows the results of the respondents' level of knowledge in classroom assessments. It is obvious from the results that generally, the respondents agree with the statements concerning level of knowledge. It was realized that teachers' general mean ($M=2.95$; $S=0.702$) is greater the cut-off mean of 2.50. The results suggest the teachers have a high knowledge of classroom assessment.

Out of the 26 items on knowledge level of teachers in the Ellembelle District, 23 had means greater than the average mean of 2.50. Out of the 23 items, teachers showed higher knowledge on 17 of them because the means were greater than the mean of means of 2.986. The results of the items with higher knowledge are presented in Table 2.

Table 2: Results of the items with higher knowledge in classroom assessment

S/N	Statements	Mean	SD
1	Consider what to assess in students before the assessment begins	3.32	0.687
2	Classroom assessment is about analyzing assessment results	2.99	0.710
3	Ensure that the technique is the most effective in measuring the target	3.36	0.675
4	Classroom assessment is developing performance assessment in the class	3.18	0.627
5	Use different technique to measure one target	3.36	0.653
6	Make the student interest the focus of assessment	3.01	0.779
7	Classroom assessment recognizes ethics of assessment in the class	3.05	0.605
8	Assessment requires appropriate methods for instructional decisions	3.34	0.618

9	Assessment is much of individual class participation.	3.10	0.776
10	Individual hands-on activities are key in assessment.	3.05	0.732
11	Assessment may include group hands-on activities.	3.06	0.584
12	Assessment of individual class participation is a good practice	3.35	0.579
13	Assessment results are the basis for planning teaching	3.28	0.682
14	Matching performance tasks to instruction and course objectives ideal for a good assessment	3.10	0.611
15	Using assessment results when developing curriculum	3.08	0.746
16	Assessment results are for evaluating class improvement	3.37	0.592
17	Assessment results are for evaluating school improvement	3.16	0.719

Source: field study (2020) (N = 207)

In conclusion the analysis on research question one revealed that the teachers in Ellembele District have a higher knowledge on classroom assessment.

Research Question two

How teachers of Ellembele District practise classroom assessment

The results of how teachers practice classroom assessment are presented in Table 3.

Table 3: *Teachers Practice of Classroom Assessment*

	Statements	Mean	S.D
1	Assess individual student participation in whole class lessons	3.07	0.700
2	Assess students on problem solving skills	3.01	0.686
3	Use assessment results for decision-making about individual students	3.27	0.693
4	Determine why students make specific mistakes	3.07	0.591
5	Inform students of the objectives of the assessment before assessment begins	2.81	0.893
6	Use assessment results when planning teaching	3.30	0.630
7	Ask students to justify their answers orally	2.57	0.815
8	Communicate classroom assessment results to others	2.52	0.868
9	Assess specific course objectives	2.96	0.678
10	Develop systematic grading procedures	3.17	0.614
11	Make sure the test adequately covers the material taught in class	3.45	0.628

12	Use peer assessments for student assessments	2.53	0.817
13	Fairly and consistently grade essay question responses	2.91	0.617
14	Use a table of specifications to plan assessments	2.94	0.680
15	Develop rubrics (marking keys) for objective grading of students	3.05	0.667
16	Fairly assign grades to all students	3.17	0.769
17	use assessment results when evaluating class improvement	3.32	0.650
18	Align test items with instructional objectives	3.16	0.667
19	Provide written feedback comments along with grades	3.19	0.705
20	Select textbook-provided test items for classroom assessment.	2.74	0.788
21	Revise previously produced teacher-made tests to match current instructional emphasis.	3.11	0.547
22	Communicate classroom assessment results to parents	3.38	0.678
23	Communicate classroom assessment results to other educators	3.00	0.722
24	Avoid teaching to the test when preparing students for tests	2.52	0.891
25	Protect students' confidentiality with regard to test scores	3.09	0.790
26	Using multiple test, essay and oral test in one examination	2.90	0.950
Mean of Means		2.996	
Mean of Standard deviations			0.720

Source: Field Data, (2020) (N = 207)

Table 3 shows the results of the respondents' practice of classroom assessments. It was realized that teachers generally have a good practice of classroom assessment ($M=2.996$; $SD=0.720$). This is because the mean of means (2.996) is greater than the average mean of 2.5. The results suggested the teachers practiced classroom assessment well.

Table 3 revealed that the teachers showed good practices on all the statements they responded to because the means of those practices are greater than the cut-off mean (2.50). The results on practices that teachers extensively perform better (means greater than the mean of means) are presented in Table 4. The mean of the statements is greater than the mean of means.

Table 4: *Results on practices that teachers extensively perform better*

Statements	Mean	SD
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1	Assess individual student participation in whole class lessons	3.07	0.700
2	Assess students on problem solving skills	3.01	0.686
3	Use assessment results for decision-making about individual students	3.27	0.693
4	Determine why students make specific mistakes	3.07	0.591
5	Use assessment results when planning teaching	3.30	0.630
6	Develop systematic grading procedures	3.17	0.614
7	Make sure the test adequately covers the material taught in class	3.45	0.628
8	Develop rubrics (marking keys) for objective grading of students	3.05	0.667
9	Fairly assign grades to all students	3.17	0.769
10	Use assessment results when evaluating class improvement	3.32	0.650
11	Align test items with instructional objectives	3.16	0.667
12	Provide written feedback comments along with grades	3.19	0.705
13	Revise previously produced teacher-made tests to match current instructional emphasis.	3.11	0.547
14	Communicate classroom assessment results to parents	3.38	0.678
15	Communicate classroom assessment results to other educators	3.00	0.722
16	Protect students' confidentiality with regard to test scores	3.09	0.790

Source: Field study (2020) (N = 207)

The result showed that in general the teachers at Ellebelle exhibit good classroom assessment practices.

Discussions

Knowledge level of teachers of classroom assessment

Research Question 1 sought to elicit information from teachers to ascertain the current knowledge level of teachers on classroom assessment. The results of the study revealed that teachers in the Ellebelle District have significant knowledge in classroom assessment. This may be due to the fact that majority of the teachers in the study are professional teachers who have at least taken a course in assessment. "These findings are in line with the work of Gronlund (2006) who suggested that a sound educational assessment requires a clear conception of all intended learning outcomes of the instruction and a variety of assessment procedures that are relevant to the instruction, adequate to sample student performance, and fair to everyone." "The

findings again support the work of DeLuca and Klinger (2010) who in a survey of 288 teacher candidates enrolled in a teacher education program in Canada, found that teacher candidates who elected to enrol in an educational assessment course had higher levels of confidence in educational assessment knowledge and skills than those who did not have formal instruction in assessment.”

“Likewise, in a study of assessment knowledge, skills, and attitudes of 217 in-service teachers in Oman, Alkharusi, Kazem, and Al-Musawai (2011) found that teachers who had a pre-service course in educational assessment demonstrated on average a higher level of educational assessment knowledge than those who did not have a pre-service assessment course.” Moe (2012) also found out that “the pre-service teachers reported higher levels of knowledge on key assessment topics than the levels of knowledge that principals believed beginning teachers should possess on respective assessment topics.”

“Notwithstanding, these findings are contrary to the work of Volante and Fazio (2007) who in a survey of assessment knowledge of 69 teacher candidates, found that the self-described levels of assessment knowledge remained relatively low for the candidates across the four years of the teacher education programme.”

Again, the results of the study was contrary to the results of Etsey and Abu (2013) who found out that the college tutors showed low capacity in general on test construction and administration. The difference in the findings may be due to the level at which the teachers were practicing. The sample in the study of Etsey and Abu are college tutors who might be quite older than the sample of this study and career wind down people tend to lose knowledge on issues of the profession.

How teachers practise classroom assessment

Research Question 2 sought to find out from teachers in the Ellembelle District, how they practiced classroom assessment. The results of the study revealed that teachers in the Ellembelle exhibited good assessment practices which could be emanating from the higher knowledge on classroom assessment shown by the teachers. “The results of the study is in line with the findings of Vingsle (2014) which found out that even though formative assessment practice is very complex, demanding and a difficult task for the teacher in several ways, the teachers did well to use knowledge and skills to elicit, interpret and use the elicited information to modify instruction to better meet student learning needs, helped students’ to engage in common learning activities

and take co-responsibility of their learning, handle new mathematics, unpredictable situations and makes decisions about teaching and learning situations in a matter of seconds. These are evidences of good classroom assessment practices.”

“Contrary to the result of this study is the results of the study of Susuwele-Banda (2005) which found out that teachers perceive classroom assessment as tests that teachers give to their students at specified time intervals and this perceptions of classroom assessment influenced their classroom assessment practices. This meant that the teachers only use test and nothing more. This is an evidence of poor assessment practice.” Koloji-Keaikitse (2012) “made a contrary finding. The study found out those primary teachers, particularly those with only a certificate needed more skill training in assessment applications, statistical applications, and criterion referenced testing. The fact that they need more training in assessment suggests the teachers exhibited poor assessment practices.” Ndalichako (2004) also found out that most primary school teachers in Tanzania preferred to use tests and examinations to evaluate students’ learning. Assessment is not only about the use of tests but multiple and comprehensive means to obtain information to make decisions. This means that tests only cannot be used as the assessment tool. Such is a deviation from good assessment.

According to Crooks (1998) reviewed “the impact of classroom assessment practices on students and observed that the choice of classroom assessment approach has a vital effect on the extent to which teaching and learning can be enhanced. Proper choice of classroom assessment method allows teachers to diagnose problems faced by students in attaining desirable learning outcomes and in devising appropriate remedial measures to redress the situation.”

CONCLUSION AND RECOMMENDATION

The findings would be relevant to curriculum developers, school staff development programmes, and policy makers, leading to changes in teacher’s classroom assessment methods to boost the knowledge and practices of classroom assessment. Teachers in the Ellebelle District have positive classroom assessment knowledge and practices. This may be due to constant supervision and support services for the teachers which always kept them on track right from their training so that the knowledge did not fade out due to non-use. It is therefore recommended that Ghana Education Service in Ellebelle District should make sure class sizes in the district are reduced so as to enhance effective classroom assessment.

Ethical Approval:

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

Consent

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

References

- Alkharusi, H., Kazem, A. M., & Al-Musawai, A. (2011). Knowledge, skills, and attitudes of preservice and inservice teachers in educational measurement. *Asia-Pacific Journal of Teacher Education*, 39, 113-123.
- Amedahe, F. K. (2002). *Fundamentals of educational research methods* Mimeograph, University of Cape Coast (Unpublished).
- Amoako, A.; Asamoah, D. & Bortey, J. (2019). Knowledge of formative assessment practices among Senior High School Mathematics teachers in Ghana. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 3 (3), p 8-13
- Brookhart, S. M. (2011). Educational assessment knowledge and skills for teachers. *Educational Measurement: Issues and Practice*, 30, 3-12. <http://dx.doi.org/10.1111/j.1745-3992.2010.00195.x>
- Calderhead, J. (1996). Teacher: Beliefs and knowledge. In D. C. Berliner & R. C. Calfee (Eds.), *Handbook of educational psychology* (pp. 709-725). New York: Macmillan.
- Crooks, T. J. (1998). The impact of classroom evaluation practices on students. *Review of Educational Research* 58(4), 438-481.
- DeLuca, C., & Klinger, D. A. (2010). Assessment literacy development: Identifying gaps in teacher candidates learning. *Assessment in Education: Principles, Policy & Practice*, 17, 419-438.
- Etsey, Y. K. A., (2012). *Assessment in education*. Cape Coast: Unpublished
- Gronlund, N. E. (2006). *Assessment of student achievement* (8th ed.). Boston: Pearson.
- Koloi-Keaikitse, S. (2012). *Classroom assessment practices: A survey of Botswana primary and secondary school teachers*. Ball state university Muncie, Indiana: Unpublished Thesis.
- Leinhardt, G. (1983). Novice and expert knowledge of individual students' achievement. *Educational Psychologist*, 18, 165-179.
- McMillan, A & Lawson, R. (2001). Classroom assessment: Teachers' knowledge practices and challenges. *International Journal of Education and Practice*, 3(12), 123-130.
- Mertler, C. A., & Campbell, C. (2005). *Measuring teachers' knowledge and application of classroom assessment concepts: Development of the assessment knowledge inventory*. Paper presented at the meeting of the American Educational Research Association, Montreal, Quebec, Canada, 23-26 February, 2005

- Metin, M. (2013) Teachers' difficulties in preparation and implementation of performance task. *Educational Sciences: Theory & Practice* - 13(3) 1664-1673
- Moe, S. M. (2012). *Learning, knowing, and doing classroom assessment: Exposure and understanding rates of assessment knowledge among elementary preservice teachers*. University of Iowa: Unpublished Thesis
- Ndalichako, J. L. (2004). Towards an understanding of assessment practices of primary school teachers in Tanzania. *Zimbabwe Journal of Education Research*, 16(3), 168-177. Available on <http://dx.doi.org/10.4314/zier.v16i3.26046>.
- Plake, B. S., & Impara, J. C. (1992). *Teacher competencies questionnaire description*. Lincoln, NE: University of Nebraska.
- Popham, W.J. (2008). *Classroom assessment: What teachers need to know?* 5th Ed. Boston: Ally and Bacon.
- Rodriguez, M. C. (2004). The role of classroom assessment in student performance on TIMSS. *Applied Measurement in Education*, 17(1), 1-24.
- Siegel, M., & Wissehr, C. (2011). Preparing for the plunge: Preservice teachers' assessment literacy. *Journal of Science Teacher Education*, 22, 371-391. <http://dx.doi.org/10.1007/s10972-011-9231-6>
- Susuwele-Banda, W.J. (2005). Classroom Assessment in Malawi: Teachers' Perceptions and Practices in Mathematics, *PhD Dissertation Submitted to the Faculty of the Virginia Polytechnic Institute and State University*, Blacksburg, Virginia.
- Vingsle, C. (2014). *Formative assessment: Teachers knowledge and skills to make it happen*. Retrieved from <http://umu.diva.portal.org>.
- Volante, L., & Fazio, X. (2007). Exploring teacher candidates' assessment knowledge: Implications for teacher education reform and professional development. *Canadian Journal of Education*, 30, 749-770.
- Wolf, A. (1995). *Competence-based assessment*. Buckingham, UK: Open University Press.
- Zhang, Z., & Burry-Stock, J. A. (2003). Classroom assessment practices and teachers' self-perceived assessment skills. *Applied Measurement in Education*, 16, 323-342