Classroom Assessment Literacy at Elementary Level: A Focused Group Discussion

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Abstract

Classroom assessment literacy focuses on knowledge and practices of classroom assessment to maximize the students' achievement. The focus of the present study was to investigate classroom assessment literacy and its practices among elementary school teachers. Elementary school teachers of district Hafizabad were investigated through focused group discussion. 15 elementary school teachers were selected through purposive sampling by considering their demographics. A semi-structured interview was conducted through selected participants which revealed the classroom assessment literacy and its practices among elementary school teachers. Interview protocol was developed based on seven standards of classroom assessment inventory developed by Mertler, 2003. The data were analyzed through narrative analysis. The study revealed that elementary school teachers know very little about classroom assessment. The classroom assessment literacy can be enhanced by providing continuous professional development in-service courses, mentoring by higher authorities and by giving freedom of assessment to teachers.

Keywords: Classroom assessment literacy, Classroom assessment practices, Teachers' assessment competence, Quality education

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40

Introduction

Classroom assessment literacy is a prerequisite for collecting data on students' achievements, as well as for using the assessment technique effectively and effectively using assessment results to improve students' achievement. Designing the assessment to meet the exact objectives of authorized parties, constructing the assessment on robust standards, accurately defining students' success, and creating assessment results that are brilliantly transferable to users are all part of an effective classroom assessment. It also incorporates learners' involvement in self-evaluation, goal setting, observation, introspection, and reciprocal learning sharing (Chappuis & Stiggins, 2012).

Popham (2011) defined assessment literacy as the ability to comprehend students' assessment results, draw proper inferences from it, and make effective educational decisions based on it. Newfields (2006) went on to say that assessment literacy is not the same for all stakeholders of assessment, and that a college student's assessment literacy is the comprehension of assessment principles, aims, and fundamental interpretation of assessment scores.

It is a schoolteacher's expertise of assessment methods and processes that is required for classroom assessment activities so that he or she can assess students' academic performance. However, in addition to the skills listed above, a professional assessment expert for college students and schoolteachers must be familiar with assessment principles, tool construction processes, and technicalities. In addition, he or she must be able to use assessment data to make a variety of instructional decisions. However, it's not quite as clear as it appears, since it is one of the most complex processes involving measurement, student reactions, learning style adjustments, adaptation, and reflection. It is beneficial in distributing information about decisions made to increase learning. It's also useful for assessing students' progress, motivating them, clarifying, and validating their achievements, and monitoring the effectiveness of the teacher's teaching (Ohlsen, 2007).

Classroom assessment attempts to increase instructors' knowledge and abilities so that they can make better decisions based on their findings. Students will benefit from classroom assessment methods such as self-assessment, peer assessment, building assessment tools, classroom debates, and problem-solving exercises if they are carried out correctly. These exercises encourage students to learn more about the subject. The evaluation assesses students' abilities and serves as a yardstick for evaluating the capacities of people who participate in the learning process

in the classroom over the course of an academic year. So, assessment is not considered a new concept at all. This is a process in which data is collected and analyzed and the decisions are made. Different types of tests, questionnaires, anecdotal records, and interviews used for assessment in the teaching learning process (Maslovaty, 2002). Instruments intended for assessment include the paper and pencil test, subjective type test, classroom observation and self-assessment test (White, 2012). The person who is the assessment literate clearly knows the difference between good and bad assessments. So, it also knows about the disadvantages of an assessment that has not been done well at all. And how to improve the performance of students while using assessment tasks (Stiggins, 2005; 2006).

Assessing classroom assessment literacy (CAL) is crucial in modern education, as it ensures that educators have the necessary skills and knowledge to design, implement, and interpret assessments effectively. Various models and frameworks have been developed globally to evaluate CAL, each offering unique perspectives and approaches to this essential aspect of teaching and learning. In this comprehensive overview, the researcher will explore some of these models with proper citations to provide a broad understanding of the assessment literacy landscape.

Assessment Literacy Wheel (ALW) is the model for assessing the assessment literacy of teachers which was developed by Popham (2019), it presents a comprehensive model that encompasses multiple facets of assessment knowledge, including the technical aspects of test construction, interpretation, and the ethical considerations surrounding assessment. This model helps educators gauge their proficiency in various areas of assessment.

The assessment literacy framework (ALF), proposed by Wiliam (2011), focuses on five key dimensions of assessment literacy: knowing the purposes of assessment, designing assessments, selecting assessment methods, interpreting assessment results, and using assessment data for educational improvement. It offers a practical framework for educators to self-assess their CAL competencies.

Classroom Assessment for Student Learning (CASL) is the model for assessing the classroom assessment literacy developed by Stiggins, Arter, Chappuis, and Chappuis (2012), emphasizing the role of assessment in student learning. It highlights the need for formative assessment, self-assessment, and peer-assessment, aiming to improve the quality of instruction and students' understanding of their own learning processes.

Assessment Literacy Continuum (ALC) was proposed by Pellegrino, Chudowsky, and Glaser (2001), which places the emphasis on the dynamic

nature of assessment literacy. It recognizes that educators' understanding of assessment evolves over time and through professional development, reflecting the ongoing nature of assessment competence.

The Assessment Triangle, introduced by Shepard (2000), provides a framework that delves into the alignment of assessment with curriculum and instruction. This model underlines the importance of congruence between these three components for effective teaching and learning, emphasizing that assessment is not an isolated practice but an integral part of education.

Evidentiary Argument Model (EAM), developed by Wiliam (2010), focuses on the concept that all assessments should be designed to provide evidence of student learning. This model helps educators construct assessments with the explicit purpose of gathering valid and reliable evidence about what students know and can do.

Four-Point Assessment Literacy Framework model, proposed by Mislevy (2012), addresses the four fundamental dimensions of assessment literacy: the construct being measured, the inference to be made, the observations or tasks that elicit evidence, and the context in which assessment occurs. It underscores the importance of being aware of these dimensions when designing and interpreting assessments.

These models and frameworks provide valuable tools for educators to assess and enhance their classroom assessment literacy. It's important to note that these models are not mutually exclusive, and many educators may choose to integrate elements from multiple models to create a personalized approach to assessment literacy evaluation. CAL is an everevolving field, and staying informed about these models can empower educators to continuously improve their assessment practices, ultimately benefiting student learning outcomes. Assessment literacy (AL) of the students in classroom is not more than how to attempt the test well. Knowledge about assessment is just as important for student as it is for teachers. Here are some abilities students should have regarding assessment (Beziat, 2015).

- 1. Student must have the necessary knowledge about assessment.
- 2. Knowledge about differentiating between different type of data.
- 3. Quality to interpret the data.
- 4. Understanding of the use of assessment tools
- Information about advantages and disadvantages of each type of assessment tool.
- 6. Awareness about which item should not be included in the test.
- 7. Clear understanding about what to assess with the test.

Hence, an assessment literate teacher examines the students' performance-based outcomes and then improves their teaching. But if the teacher is not able to assess the students in a better way, it really means that he/she is an assessment illiterate teacher because he/she will not serve the purpose of examining the students (Deneen, 2016).

Significance of Study

This research aims to contribute to the field of education by offering insights into the potential of focused group discussions and the application of Mertler's 2003 standards in improving classroom assessment literacy. The findings are valuable for educators, educational institutions, and policymakers seeking to enhance the quality of classroom assessments and, by extension, the learning experiences of students.

The study is significant as it identified the need of teachers' preparation and training in the student assessment, development of assessment tools in the use of assessment results intended for the betterment of teaching learning process along with the understanding in the teachers concerning the possible negative consequences of poor and inaccurate assessment.

This study is important for all teachers. All teachers assess their students due to different purposes like, they assess them to identify their understanding, mastery level, to provide them feedback, to develop the efficiency of teaching – learning process, and for so many other purposes, consequently they need knowledge associated with assessment. The study possibly will help in deepening the perspective of teachers concerning assessment literacy and to familiarize the teachers to make use of assessment as a perfect teaching tool to promote the learning among students.

The study can also provide insight to the curriculum developers concerning the assessment literacy of teacher educators. It possibly will also be favorable to the educational planners in knowing the proficiency and know-how of teacher educators in the assessment.

Statement of Problem

In contemporary education, the importance of effective classroom assessment cannot be overstated. It serves as a cornerstone for student learning and academic achievement. However, for classroom assessments to fulfill their intended purpose, educators must possess a profound understanding of assessment practices and standards. Classroom assessment literacy, defined as the ability to design, implement, and

interpret assessments effectively, is pivotal for educators in providing students with meaningful learning experiences (Popham, 2009).

To address the need for enhancing classroom assessment literacy among educators, the present study centers on the utilization of Mertler's 2003 standards as a framework for professional development. Mertler's standards, first introduced in his work "Designing Scoring Rubrics for Your Classroom" (2003), emphasize the creation of clear and meaningful assessment tools, ensuring that assessments align with instructional goals, are fair, reliable, and valid, and facilitate student learning.

This research seeks to explore the potential of focused group discussions as a pedagogical strategy for promoting classroom assessment literacy, particularly by using Mertler's 2003 standards as a comprehensive framework for assessment design and evaluation. In the context of Punjab, Pakistan, the school education department (SED) is trying to provide better learning opportunities to students. With collaboration of various stakeholders like QAED, PMIU, PEF, and PEC, it is trying to ensure the quality of education among students. Teachers are provided with various training regarding their professional development but still it seems that students are not getting as much quality education as desired. Especially if we see the assessment practices of teachers in classrooms, many teachers are not well familiar with assessment standards at the elementary level of SED. It can be a reason for the low performance of students when they go to higher levels of schooling. It is the teacher who set papers for students and is responsible for making them, which may be the cause of biases in measuring the students' performance. So, it is very important to ensure that the teachers know the standards of classroom assessment so that they can set the papers according to assessment standards.

Objectives of Study

The objectives of the present study were to:

- 1. Explore the classroom assessment literacy of elementary teachers.
- 2. Compare the implementation of classroom assessment literacy standards demographically to see whether demographics affect or not.
- 3. Find out the classroom assessment practices of teachers that mean how teachers assess the students in classrooms.

Research Questions

The research questions of the present study were:

- 1. What is the classroom assessment literacy of elementary school teachers?
- 2. In demographics, which teachers have high classroom assessment literacy level at elementary level of education?
- 3. What are the most frequent classroom assessment practices of teachers at elementary level?

Research Methodology

The present study was designed as a focused group discussion in which the researcher discussed the research questions with a focused group of participants. The group was composed of those elementary school teachers which truly represent the population of study.

Population and Sampling Framework

The population of the present study comprised all elementary school teachers of district Hafizabad. The sample was composed of 15 elementary school teachers selected through purposive sampling to create a focused group. This sampling technique is subjective in nature and the researcher generated the qualifying criteria by following which the participant will be part of research study (Dudovskiy, 2021).

The ESTs were selected based on their demographics. 10 teachers were from rural side and 5 teachers were from urban side. All the selected participants were male due to convenient part of researcher to reach them. All the teachers secured master's degree in any subject and having teaching experience of more than 5 years. The selection criteria for this research study were designed to target specific subgroups of the teaching population to delve deeply into particular aspects that the research intends to investigate. Each criterion was grounded in its own set of assumptions and was chosen to facilitate a more focused examination of the research questions, shedding light on how gender, location, education, and experience can influence the teaching profession. These assumptions were essential for framing the study's context, goals, and methodologies.

Instrumentation

The researcher developed a semi – structured interview protocol to carry out focused group discussion. The semi – structured interview protocol

consisted of 16 question statements according to research objectives. All the questions were developed based on seven standards of classroom assessment inventory developed by Mertler, 2003. The group discussion was for 1 hour.

Data Analysis

Data were analyzed by using narrative analysis of the answers of respondents.

Results and Discussions

This focused group discussion was carried out for 1 hour and every participant shared their experiences about classroom assessment practices which led to different approaches for developing classroom assessment literacy. The findings were as below:

Research Question No. 1: What is the classroom assessment literacy of elementary school teachers?

To answer this question, the research participants were asked questions in focused group discussion by keeping in view the standards of classroom assessment literacy proposed by Mertler in 2003. These standards are Choosing Appropriate Assessment Method (CAAM), Development of Appropriate Assessment Methods (DAAM), Administration, Scoring and Results Interpretation (ASRI), Use Results for Making Decisions (URMD), Use Results of Assessment for Giving Grades (URAGG), Communication of Assessment Results (CAR), and Recognizing Unethical Methods of Assessment (RUMA). The discussion of these standards is as below:

2.1 Standard 1: Choosing Appropriate Assessment Method

The researcher asked various questions related to the selection of appropriate methods for classroom assessment. The participants told the names of types of classroom assessment that are formative and summative assessment, but they found themselves unable to discuss the implications of these assessments. They could not answer about proper selection of assessment method. One of the participants said that "I use paper – pencil tests for checking the concepts of students". Another participant said that "I ask questions from students during my lecture time and after completion of my lecture I ask students to sum up the concept what they understand". A participant said that "I consider the students' cognition level while

asking questions. Similarly, if students need guidance to solve a problem, they can freely ask me, and I give them full guidance". A participant argued that "I consider time of test, clear instructions for test, length of question statements, and students mental age while developing a test for classroom assessment". When the researcher asked about the effective use of assessment, the participant argued in favor of assessment for learning. A participant said that "assessment helps students to learn in an effective way". No one of the participants told to relate the assessment method with set objectives of the study. They only named the assessment methods as well as their use in favor of enhancing students' learning.

The findings revealed that many of the teachers used paper – pencil tests, and oral questioning, but very few of the participants used concept mapping, and problem solving as a method of classroom assessment. No one was able to describe the modern alternative techniques of classroom assessment methods like portfolios, jigsaw etc.

2.2 Standard 2: Development of Appropriate Assessment Methods

When the researcher asked questions about developing classroom assessment, all the selected participants said that they use exercise questions in their tests to assess their students. Only one participant said about the validity and reliability of tests. He said that "I use test – retesting to ensure the reliability of my tests. Only a valid test can be considered as a reliable test. So, I use to develop my own test to find out the achievement of students".

The study identified that very few teachers were found to develop their own tests for classroom assessment while the majority of the teachers used exercise questions to develop tests for classroom assessment. No one was found to describe reliability as well as the validity of test except of one participant.

2.3 Standard 3: Administration, Scoring and Results Interpretation

The researcher asked various questions about the administration, scoring, and interpretation of test scores and the participants said that they administer the test when the unit of course is covered. A participant said that "I conduct an assessment after completion of each concept. I make two different tests of the same concept to ensure the achievement of my students". Another participant said that "I conduct an assessment after completion of the whole unit to know how many learning outcomes are achieved by students". The participants also told various factors that must be considered while administering tests and these include time of test, clear instructions of test, cognition level of students, classroom

environment, and managing photocopy of tests. A participant said that "clear instructions for test have a great importance in administering tests. If instructions are not clear, then students could not be able to perform well". Another participant said that "avoiding cheating and guessing is very important to ensure achievement of students. For this proper management of paper is very important".

When the researcher asked about scoring of tests, all the participants said that they score their tests by checking the correct answers in the book. Only a few participants named the term rubrics for scoring tests, but no one was found to define and practice rubrics. A participant said that "I make rubrics of my MCQ test to score them easily". Another participant said "rubrics help to score the tests easily. It is time saving when we use rubrics to score the tests". No one was able to discuss the types of rubrics and their implications.

When the researcher asked about interpretation of scores, all the participants said that they use percentages as interpretation of test – scores. No one was able to name any other interpretation method of test – scores like percentiles, rank orders etc. When the researcher asked about percentiles, the participants said that it is the same as the percentage.

2.4 Standard 4: Use Results for Making Decisions

When the researcher asked questions about the type of decisions made after getting scores of classroom assessment, all the participants were in favor of decisions as pass or fail. One participant said that "on the basis of classroom assessment results we can give the judgment as pass or failure of students". No one was able to define different types of classroom tests like criterion referenced test (CRT), and the norm referenced test (NRT). They only said that they can infer the students as pass or fail based on assessment results.

2.5 Standard 5: Use Results of Assessment for Giving Grades

The researcher asked the participants about assigning the grades to students, they responded that they assign them grades based on set criteria that is on or above 80% scores, they assign them A grade and 65 to 79 % they assign them B grade. Below 33% they assign them an F grade. No one can define the grading of CRT and NRT.

2.6 Standard 6: Communication of Assessment Results

Asking questions regarding communication of students' results, the reaction of all participants was positive. Most participants said that they gave their tests to be cross signed by their parents with their feedback. A

participant said that "whenever I tried to conduct a parent – teacher meeting to discuss the progress of students, I felt disappointed because parents don't bother to come to attend parent – teacher meetings". Another participant disclosed that "I marked the tests and handed them over to students to make it signed on the tests. The students come with their parents' signatures and their feedback on tests. By this the students as well as their parents are well-known about the progress of students". So, all the participants were in favor of communication of students' progress. They claimed that it is very important for the accomplishment of students' learning to communicate their results with them as well as with their parents.

2.7 Standard 7: Recognizing Unethical Methods of Assessment

The researcher asked about unethical behavior and its control in the classroom, the participants claimed that they gave very clear instructions before administration of the test. Only one participant said that "I gave the question bank to students to review it. By these practice students become familiar with question formation which ultimately results in avoiding unethical behavior in the classroom". The researcher concluded that teachers are not very familiar with unethical behavior during classroom assessment.

Hence, an overall view of discussion about classroom assessment showed that elementary school teachers were found unaware of classroom assessment standards, and they were also found unable to implement these standards in their classrooms. So, it can be easily concluded that elementary school teachers have low classroom assessment literacy apart from the fact that they also attained professional degrees too.

Research Question No. 2: In demographics, which teachers have high classroom assessment literacy level at elementary level of education?

The demographics showed that there is no impact of demographics on assessment literacy of the teachers as the research participants were selected from rural and urban regions, all the participants have master's degree and qualified the professional degrees as well. Most of the teachers have 10 years of teaching experience but still they were found unaware of the majority of questions regarding assessment practices.

Research Question No. 3: What are the most frequent classroom assessment practices of teachers at elementary level?

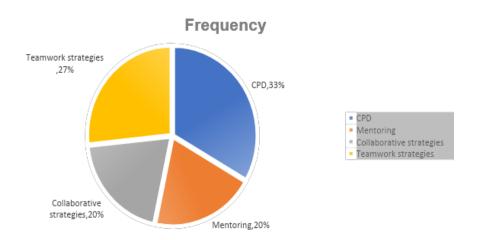
The present study elaborated that most of the teachers used exercise questions to solve from students in their classrooms as assessment

practices. Very few discussed that they are using self-made tests to ensure the students' achievement in classrooms.

Recommendations of Teachers about Assessment Practices

After elaboration of classroom assessment practices, the researcher asked about the views of teachers regarding high literacy of classroom assessment. The participants said that classroom assessment literacy can be ensured by In-service training of CPD (Continuous Professional Development), mentoring by high authorities, knowing about teamwork strategies, and the collaborative teaching – learning techniques.

Fig. 2.5 Figure 2.5 elaborated that the majority of participants were in favor of CPD. That means if we give in-service proper continuous training on modern assessment practices, the classroom assessment literacy of teachers will be increased. Similarly, 27% were in favor of teamwork strategies, 20% in favor of collaborative strategies and 20% were in favor of mentoring by higher authorities.



Conclusion

Most of the participants were found not very familiar with the standards of classroom assessment and their implications in classrooms, so it can be concluded that there is low classroom assessment literacy among elementary school teachers. Hence, these findings elaborate that there is a need to enhance the classroom assessment literacy of elementary school

teachers. There was not any demographic factor revealed that can influence the assessment literacy of elementary school teachers either they are from urban side or rural side. Moreover, classroom assessment literacy can be enhanced by proper CPD in-service training, mentoring by higher authorities, collaborative as well as teamwork strategies of teaching – learning process.

Recommendations

Based on findings of present research, followings were the recommendations made:

- A teacher might be provided various in-service training especially on designing assessment exercises as well as on developing rubrics so that they can enhance their literacy of classroom assessment.
- There is also a need to make our teachers familiar with alternative assessment techniques so that our teachers can fulfill the challenges of the modern era of assessment.

For future consideration of research, it can be suggested that:

- Classroom assessment literacy might be investigated by using technology and ICT software.
- The present study was qualitative based, and it can be further studied by using quantitative research design.

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