



Journal of Education & Humanities Research (JEHR)
Institute of Education & Research (IER), University of Balochistan, Quetta-
Pakistan

Volume: 17, Issue-I, 2024; ISSN:2415-2366 (Print) 2710-2971 (Online)

Email: jehr@um.uob.edu.pk

URL: <http://web.uob.edu.pk/uob/Journals/jehr/jehr.php>

**“Assessment Practices at PhD Level: A Phenomenological Study of the PhD Scholars’
Experiences”**

Munaza Nausheen: Associate Professor Institute of Education and Research, University of the Punjab, Lahore

Ayesha Zulfiqar: Institute of Education and Research, University of the Punjab, Lahore

Received: April 15, 2024

Accepted: May 10, 2024

Published: **June 30, 2024**

KEY WORDS

**Classroom
assessment,
formative
assessment,
summative
assessment, PhD
scholars**

ABSTRACT

The primary aim of this research was to investigate the experiences of PhD scholars regarding classroom assessment practices. The study adopted a qualitative approach, utilizing a phenomenological research design. The study focused on the population of scholars enrolled in PhD Education at a reputable public university in Pakistan. A sample of six PhD scholars was selected using a purposive sampling technique. Semi-structured interviews were conducted to explore into the assessment experiences of these scholars. Data analysis was carried out through thematic analysis manually, resulting in the identification of major themes and sub-themes. The findings highlighted the use of a variety of assessment methods, including both alternative and traditional approaches, by different teachers. Notably, PhD scholars exhibited a preference for formative assessment methods over summative assessment. Based on these results, it is recommended that a combination of various assessment methods be employed at the PhD level. Additionally, organizing training workshops for teachers to enhance their assessment practices is also recommended.

Introduction

Assessment is an important and integral part of teaching through which teachers collect information about students' performance and achievement. It is considered to be the key aspect of teaching and learning process (Dhindsa, Omar, & Waldrip, 2007). In practice, very limited type of assessment techniques are used by teachers during teaching process. Assessment strengthens students' performance and learning, gives instruction about student improvement, and increases self-esteem (Herrera, Murry & Cabral, 2007). Students have to go through a variety of assessment types during their educational years at various levels such as early childhood, elementary and secondary education (Linn & Miller, 2005).

Scriven (1967) recommends that the purpose of formative assessment is informative for improved instruction and summative assessment focus on measuring students' achievement. In addition to the purpose of responsibility, assessment of classification, and prediction changed in the progression of education and students' learning. When student have to face different experiences from classroom assessment then these experiences are considered significant causes which shape their recent views about classroom assessment (Mussawy, 2009).

Assessment has several benefits for students such as help improving learning; develop a good way of communication, and teacher student interaction and participation. Teacher's instant feedback also has potential benefit for the students (Allen, Ort, & Schmidt, 2009; Heritage, 2007).

Formative and Summative Assessment

The formative assessment is based on how teachers and students

respond to student work and how their pupils' current learning situations and values relate to the objectives and standards of dialogue used to improve students' learning experiences (Nicol, 2009). Formative feedback is exploratory, temporary in order to promote student participation as part of the dialogue between students and teachers. In many cases, teachers and students are in a categorized relationship that prevents learning collaboration (Pereira, Flores, & Niklasson, 2015).

On the other hand, summative assessments create tests, signs, academic reports and qualifications that are highly socially evaluated in order of comprehensive assessment events. In general, it is designed to help evaluate the learner's accomplishments and subsequent outcomes in the program. Certify performance and qualify to help make decisions on access to other learning programs. Other people decide to choose and provide information that is useful for providing information and provide formal evidence of learner's abilities (Awoniyi & Fletcher, 2014).

Types of Formative Assessment

The terminology regarding evaluation methods, specifically formative, alternative, and authentic assessment, is often used interchangeably in current literature, yet certain inconsistencies persist. Some authors define authentic assessment as a formative evaluation occurring throughout the learning process, while summative assessment is positioned at its conclusion. However, this perspective encompasses both formative and summative assessments alongside various other forms of authentic evaluations. These may encompass diverse types of formative assessment, as

outlined by Herrera, Murry, and Cabral (2007).

Portfolios: The concept of developing portfolios in the history of education is not novel. Portfolios typically feature tangible examples of students' work that illustrate their progress, growth, and comprehension over time. By establishing portfolio objectives, educators can determine which student aspects to consider, how to manage them, frequency of assessment, and more. Common portfolio formats often showcase students' best work, showcasing their learning and progress (Wiggins & McTighe, 2007).

Diagnostic assessment: Diagnostic assessment is often distinguished from formative evaluation by various authors. However, the purposes of diagnostic assessments can overlap with those of formative assessment. Pre-assessment or diagnostic evaluation is utilized to gather data about students' educational development and identify their needs (Wiggins & McTighe, 2007).

Self-assessment: Self-assessment serves as a crucial tool for evaluating learning. When students assess their own work, they strive to achieve higher standards of performance. This approach indicates that students demonstrate their performance against high-quality criteria and develop a readiness to apply these standards. Herrera, Murry, & Cabral (2007) discuss students' willingness to self-assess or evaluate peers, noting that once students gain a comprehensive understanding of the outcomes, they become more effective learners and are dedicated to their learning. They engage in discussions about their assessments with teachers and peers.

Peer-assessment: Teachers find peer review beneficial within self-assessment as it encourages students to set specific learning objectives (Chappuis &

Stiggins, 2004). Peer review entails students engaging in discussions with classmates and providing feedback on each other's work, serving as a feedback mechanism for both students and teachers. Black and William (1998) suggest that as students learn to evaluate their peers against learning goals, peer review enriches the learning process and can be utilized effectively.

Performance-based assessments: Performance-based assessments provide insights into students' learning experiences, offering a lasting impact. This approach aids students in identifying how they acquire and apply knowledge in various contexts (Herrera, Murry, & Cabral, 2007; Linn & Miller, 2005).

Questioning: While questioning has been a longstanding practice in education and classroom evaluation, its evolution has shifted from closed-ended to more informative, open-ended formats over time. Teachers are encouraged to develop more effective questioning techniques to foster critical thinking environments where students engage in thoughtful responses to questions (Black, Harrison, Lee, Marshall, & William, 2003).

Cooperative group assessment: The concept of group work varies depending on the context and background. In the West, individual achievement traditionally received more emphasis than team accomplishments, such as in sports. However, recent trends highlight the growth of collaborative teamwork in education, with teachers recognizing that students' strengths and skills are often well-defined through group activities like collaborative learning (Herrera, Murry, & Cabral, 2007).

Assessment as a Process: Assessment is frequently viewed as a discrete activity or event. However, formative

assessment, known as assessment for learning, is best understood as a process. This perspective conceptualizes evaluation as a dynamic process encompassing assessment activities and specific evaluation tasks rather than isolated events (Klinger & Luce-Kapler, 2007).

Researchers assert that incorporating assessment for student learning is a fundamental aspect of competitive analysis. Delandshere (2002) suggests the terms "formative assessment" and "summative assessment" to delineate assessment responsibilities. Formative assessment is an ongoing process aimed at monitoring student learning, evaluating teaching effectiveness, and providing feedback to enhance the curriculum. Current literature on assessment and instruction emphasizes the importance of ongoing evaluation in guiding lifelong learning. There is a correlation between students' perceptions of assessment by teachers and their learning outcomes, which encompasses cognitive and affective domains. The format of assessment significantly impacts students' performance, a facet explored within the broader context of the assessment process (Schram, 2005).

Assessment Methods in Higher Education

Various assessment methods are endorsed by university faculties, playing a crucial role in enhancing the quality of learning and teaching (Pereira, Flores, & Niklasson, 2015). These methods exert both positive and negative influences on student learning, serving as stimuli for improvement and study enhancement. The way students engage with assessment tasks significantly shapes their learning perspectives. Consequently, teaching methods must align with assessment methods,

considering learning objectives to ensure effectiveness in teaching (Watering, Gijbels, & Dochy, 2008).

The primary focus of any educational program is the teaching and learning process, with students showing keen interest in assessment methods. Therefore, evaluation should not be perceived as merely a concluding process; rather, students are attentive from the beginning to the end, as it offers a precise depiction of the program and students' involvement in various activities (Meyers & Nulty, 2009). It is imperative to select assessment methods that suit teaching and learning objectives. While traditional methods like tests or written exams are prevalent in higher education, their efficacy is limited to certain contexts and objectives, potentially leading to rote memorization and replication (Pereira & Flores, 2012).

Recent research indicates that written tests often foster shallow learning, emphasizing knowledge repetition under pressure. Alternative assessment methods or learner-centered approaches, such as portfolios, projects, self- and peer-assessment, collaborative assessment, encourage deeper learning and the development of advanced skills. These methods promote independence, reflection, and accountability, positively influencing student learning outcomes. Moreover, they provide immediate feedback to students, fostering continuous improvement (Pereira, Flores, & Niklasson, 2015; Webber, 2012).

Students with an external learning orientation are typically subjected to assessment practices aligned with teacher preferences and teaching objectives (Fletcher, Meyer, Anderson,

Johnston, & Rees, 2012). Understanding assessment practices employed by university professors across various fields is essential.

In Pakistan, there is a scarcity of research on classroom assessment methods at higher levels, particularly at the MPhil and PhD levels. Therefore, this study aims to investigate how students perceive classroom assessment experiences facilitated by their teachers at the university level. Students' perceptions of classroom assessment vary across different educational levels, influencing their learning outcomes. While international and Pakistani studies on this topic exist, detailed qualitative research specific to the Pakistani context is lacking. Hence, it is crucial to conduct a study examining the role of assessment and PhD students' experiences with assessment practices by their teachers. This research aims to provide valuable insights and recommendations for both teachers and students in higher education.

Objectives of the Study

The study aimed to achieve the following objectives:

1. Investigate the experiences of PhD scholars regarding the assessment practices employed by their teachers.
2. Examine the assessment methods utilized by teachers at the PhD level.
3. Explore the perceived role of assessment practices in the classroom according to PhD scholars.

Research Questions

The study sought answers to the following research questions:

1. What are the perceptions of PhD scholars regarding assessment

practices used by teachers in the classroom?

2. Which assessment methods are employed by teachers at the PhD level?
3. How do PhD scholars perceive the significance of assessment practices in the classroom?

Methodology

This study was qualitative in nature utilizing a phenomenological research design to describe PhD scholars' experience regarding assessment practices used by their teachers in classroom. The study was informed by the interpretive paradigm.

Population of the study were all (n=15) scholars enrolled in the Spring and Fall sessions of PhD Education program at a reputable public university in Pakistan. Purposive sampling technique was used for selecting sample. Six scholars (4 females and 2 males) were included in the sample.

Semi-structured interview protocol was developed by the researchers in order to collect data. Based on the literature review, interview protocol focused on some major constructs: nature of assessment (Formative and summative methods and its types), scholars' experiences about different types of assessment methods, and role of assessment. Interview questions aligned with the research questions of the study. For validation, instrument was reviewed by two experts. One mock interview was also conducted by the researchers for ensuring the validity and judgmental reliability of the interview questions. Information from the mock interview was not used in the study.

Data were collected personally by the researchers after getting informed consent from sampled PhD scholars. Face-to-face interviews were conducted,

and audio recorded. Written notes were also taken during the interviews. Duration of each interview was around 30-45 minutes. Researchers transcribed the audio recorded interviews. A thematic analysis was performed manually for analyzing data. For coding, researchers reviewed the interview transcripts and identified the important themes. Then reading and re-reading of the data was done for highlighting and recognizing important sub themes. This process followed several stages in a cyclic, back and forth fashion.

Results and Discussion

The results of this study are discussed under some themes about the experiences of PhD scholars about assessment practices in classroom. The following themes attempt to answer the research questions: assessing and supporting student learning, assessment as formative and summative, and classroom assessment as enriching experience.

1. Assessing and Supporting Student Learning

The analysis of current data indicates that the majority of comments from PhD scholars (refer to table 1) suggest that assessment serves diverse roles in the classroom. They acknowledge that PhD classroom assessments not only contribute to enhancing their learning but also aid them in achieving specific levels of PhD education positively. These scholars view assessment as an accurate reflection of learning. Unlike assessments in higher classes that primarily evaluate previous performance, at the PhD level, teachers assess students' reflective and critical thinking skills using various methods. These findings align with the notion that classroom assessment practices have garnered significant attention in recent years, being an integral part of the

teaching and learning process. Classroom assessment is utilized for both evaluating and supporting student learning (Singh, Lebar, Kepol, Rahman, & Mukhtar, 2017).

Table 1
Role of Assessment as Assessing and Supporting Student Learning

Major Themes	Sub-Theme	Evidences
Assessing and supporting student learning	Alignment the previous concept to existing concepts	<p>"I think they assess to find a difference between achievement levels from MPhil to PhD" (Participant E, F).</p> <p>"Role of assessment at PhD level is just to make sure that the students are able to align with the concept which they are already being taught" (Participant A, F)</p>
	Provide evidences	<p>"Because assessment gives the support and provide evidences to teacher, administer and student to know the process and how much their efforts work" (Participant B, F.)</p>
	Exact picture of learning	<p>"Assessment at PhD level is very much important, in the sense that it provides the teacher exact picture what student has learnt " (Participant D, F.)</p>
	Checking student knowledge	<p>"Teacher must assess to know students' knowledge about the concepts and according that students organize their plan of study" (Participant B, F.)</p> <p>"It provides the teacher exact picture what students has learnt in past 18 year of education (Participant D, F.)</p> <p>"The positive aspect is that due to assessments student can judge their strong and weak areas" (Participant A, F)</p> <p>"Teacher assess students to check their updated knowledge of the class and to know the areas where students need further guidance and aspects which are needed to be addressed more</p>

clearly" (Participant C, M)

According to Table 1, participants emphasized the crucial role of assessment in enhancing learning and identifying weak points in learning areas. They also noted that assessment assists teachers in providing more guidance, thereby facilitating better achievement.

2. Assessment as Formative and Summative

Assessment is an integral component of learning, and teachers employ a variety of assessment methods. Similarly, data analysis revealed that PhD scholars engage with different types of assessment methods that necessitate instant feedback. At this level, the most effective methods are utilized, offering students immediate feedback on their performance and preparing them for real-world situations. These methods foster a sense of responsibility and encourage reflection on learning (Pereira, Flores, & Niklasson, 2015).

In Table 2, PhD scholars' feedback unveils various forms of formative and summative assessment, with a preference for formative assessment. This finding resonates with Pereira and Flores (2016), who assert that alternative assessment methods or learner-centered approaches such as portfolios, projects, self and peer assessment, simulations, and collaborative assessment are pivotal for deep learning and the cultivation of new knowledge at higher education institutions. Such methods facilitate more effective learning, promoting the development of independence, responsibility, and critical thinking, thereby fostering positive learning

experiences. Themes, sub-themes, and comments are detailed in Table 2

Table 2
Assessment as Formative and Summative

Major Theme	Sub-Themes	Evidence
Formative/ Alternative assessment	Independent learning	"I guess its independent learning and such learning is of application level " (participant D, F)
	Peer discussion and peer assessment	"There is a lot to learn from eachother during discussion. I think it also one of the best assessment techniques through peer discussion and peer assessment" (participant D, F). "Our teacher uses self-assessment, peer assessment, portfolio and presentations all in each class respectively" (participant A, F) "Especially the peer assessment must be appreciated at PhD level" (participant B, F)
	Presentation/ Project/Seminar	"I think most beneficial method at this level is learning alone with the help of presentation, seminars on project method because it helps the learner to explore the cocept in detail then and summarize it on their own" (participant E, F) Presentation is also one of the sources to enable us to present our work confidently and logically with proved references or facts (participant D, F)
Summative assessment	Instant feedback	I appreciate more the contingency approach of assessment by our teacher and instant feedback (participant A, F) "In my opinion, weekly assignments and class activities are best types and it makes us learn more in which teacher give immediate feedback" (Participant C, M).
	Summative assessment as burden	"Summative assessment is also essential for declaring the end of any level or course or period of learning experiences but summative assessment increases the burden of study which student cannot cover effectively" (participant E, F)
	Portfolio	"Our teacher maintains our portfolio for final assessment" (participant D, F). "Our teacher uses self-assessment, peer assessment, portfolio and presentations all in each class respectively" (participant A, F).
	Written test/Exam	"Other teachers use presentation and a written assessment patterns to make us learn (Participant A, F). "Some students learn better

through presentations, some through exams" (Participant C, M).

Table 2 presents insights from participants indicating that both formative and summative assessments are commonly utilized for evaluating scholars' learning. However, one out of five scholars expressed skepticism about the effectiveness of formative assessment, citing pressure on students, as participant C stated, "formative assessment provides feedback to the teachers but it develops pressure among the student." Conversely, a negative viewpoint on summative assessment was expressed by participant D, who mentioned, "summative assessment could have constraints if the teacher is not well-prepared to conduct this assessment."

Teachers employ a variety of activities to assess students' knowledge, including classroom discussions, surprise written tests, presentations, group discussions, quizzes, and written assignments. Short seminars, projects, and other classroom activities are favored by both teachers and PhD scholars. Peer assessment is also considered an important method for evaluating performance and learning. This finding resonates with the assertion by Herrera, Murry, & Cabral (2007) that self-assessment and peer-assessment are crucial tools for measuring learning, as they encourage students to strive for high-quality performance.

Alternative assessment techniques provide valuable insights into individual student potential, as mentioned by participant E, who highlighted their influence on effective learning, offering learning experiences from multiple perspectives. While two out of five participants prefer summative

assessment at the PhD level, participant B emphasized its benefits in determining objective achievement. However, not all scholars prefer summative assessment, particularly as a portfolio or final exam. Any assessment type offering immediate feedback is generally appreciated by learners, aligning with Amua-Sekyi's (2016) assertion that immediate feedback in formative assessment facilitates learning and promotes deeper approaches to learning.

Summative assessment is generally less preferred by PhD scholars, with immediate feedback on achievement during classroom assessment being more appreciated by learners (see table 2). Some students exhibit less optimism about summative assessment at the PhD level, consistent with Boud and Falchikov (2007), who categorized summative assessment negatively as it reflects external learning and tends to engage fewer cognitive skills, resulting in fragmented learning. Dochy, Segers, Gijbels, and Struyven (2007) also noted that written exams or easy-type exams often lead to lower levels of understanding, with students reproducing information under pressure, indicative of surface-level learning. However, Pereira and Flores (2016) highlighted that summative assessment remains an institutional requirement at universities and is widely utilized.

3. Enriching Experiences during Classroom Assessment

Students encounter various experiences during assessments at all levels, and similarly, PhD scholars face both positive and negative experiences at higher levels of education. Classroom assessment plays a crucial role in shaping scholars' learning experiences by providing a platform for comparing thinking skills and performance.

However, some scholars express dissatisfaction with their overall assessment experiences. For instance, participant A voiced discontent, stating, "The overall experience about assessment is not good. Being PhD students, we all wanted to learn more through new tasks, we wanted to be assessed through different projects on hand...". Similarly, participant C remarked, "Classroom assessment is mostly used for grading or achievement, and we do not learn for learning." This finding aligns with Firestone and Mayrowetz (2000), who argue that summative assessment primarily focuses on achievement and lacks positive effects on classroom climate, the student learning process, and teaching.

Positive experiences related to assessment practices include teacher encouragement, class cooperation, and motivational activities for learning. Different types of assessments foster critical thinking, reflection, and communication, promoting effective learning. According to Mussawy (2009), students' experiences with classroom assessment serve as significant indicators of their current perceptions of assessment. Teacher assessment patterns and cooperation positively influence student learning. Table 3 presents sub-themes and evidence related to classroom experiences and their underlying reasons.

Table 3
Classroom Assessment as Enriching Experience

Major Theme	Sub-Theme	Evidence
Classroom Assessment as Enriching Experience	Surprise or Informed Class Activity	"Teachers do tell what they will be going to assess in mid-terms but not about the other class activities" (Participant C, M) "And a few teachers do analysis on daily basis or chapter wise assessmentis conducted as a surprise or informed" (Participant B, F). "Sometimes a surprise class room assessment is not encouraged by some

Testing and exams consultation with scholars	students because they are not well prepared for it whereas some other students prefere and support surpsis assessments as it may improve their score for final assessment" (Participant E, M). "The tests we took at PhD level till now are mostly of higher cognitive levels and therefore are made quite well" (Participant C, M) "Yes, our teacher discuss in class about the type of test. Taking a test is always a good experience because it enables us to know our deficiencies of knowledge" (Participant B, F). "Yes, some teachers ask students about their prefrences for the type of assessment they to be conducted for better learning of pecific topics" (Participant E, F). "Yes, we are immediately able to assess whether the assessment is good or bad and the experience has not always being pleasant" (Participant A, F). "If we know about the content to be assessed , it helps us in scoring higher as we get the margin to prepare better" (Participant C, F).
Exam/test experience	"Taking tests is always a good experience as it helps us judge ourselves where do we stand and make us learn even better" (Participant C, M). "Taking a test or exam is not a good tool at this level because every learner has his/her own area of interest and different learning aspects to get command on a particular topic" (Participant E, F). The kind of distrust that the test is either not made by the teacher or either will not be checked by the teacher, lack of clear instructions has made test/ exams a bitter experience" (Participant A, F). "Assessment enable me to know my work, and how much i know about particular content area. After the poor results it motivates me to learn and overcome my failures deficiencies" (Participant B, F).
Teacher consideration (attitude, motivation, encouragement)	"I feel like I am so lucky that I got such a teacher who evaluates me to learn better" (Participant D, F). "My teachers are very much encouraging I never felt that I am new one here" (Participant D, F). "Teachers also treat us as mature individuals" (Participant C, F).
Class cooperation	"All students cooperate during activities. I take very seriously all these activities" (Participant D, F). "Positive experiences are due to dedicate and cooperative tasks done by the learners with teacher guidance" (Participant E, F).
Strict polices of the semester system	"negative experiences are due to lack of time, uncooperative attitudes of teachers and strict polices of semester system" (Participant E, F)
Conducted seminar and workshops	"There is a need to conduct workshops and seminars about different types assessment for enhancing the knowledege and understanding of assessment methods" (Participant B, F). "Teachers do not use alternative methods of assessment, they use only traditional method. Awareness about

the application of other assessment methods is needed." (Participant E, C).

Scholars' responses indicate that the characteristics of teachers play a significant role in shaping assessment experiences. Positive attitudes and cooperation from teachers are similarly influential in fostering student learning (refer to table 3). PhD scholars encounter challenges stemming from teacher behavior, attitude, and a lack of cooperation. Various scholars report different experiences during classroom assessments for various reasons. As detailed in table 3, scholars highlight instances where teachers administer surprise activities or tests without prior notice, impacting student learning and achievement negatively. This observation aligns with Chappuis and Stiggins (2004), who noted that unexpected exams pose challenges for scholars as they may not be mentally prepared, consequently affecting their performance. However, unexpected exams can sometimes yield both positive and negative experiences for scholars. Conversely, Black, Harrison, Lee, Marshall, and William (2003) observed that while teachers may seek student input on assessments/exams, they often disregard these suggestions in favor of their own decisions in the future.

Conclusion

The findings indicate the significance of assessment in the learning process at PhD level, with immediate feedback offering a chance to address learning deficiencies. Both positive and negative experiences regarding classroom assessment practices conducted by teachers were revealed. Positive student experiences with assessment include consultation on testing and exams, favorable exam experiences, teacher

cooperation, and consideration (attitude, motivation, encouragement) during classroom assessment. Teachers consulting or informing students about exams/tests reduces test anxiety and improves performance. However, student involvement in assessment activities appears superficial, with minimal discussion and involvement regarding assessment activities tied to grades or involving written feedback.

Assessment plays a crucial role in the interaction between students and teachers in the learning and teaching process. Traditional classroom assessment aims to prepare and report on student achievement. Scholars prefer various forms of formative assessment (independent learning, peer discussion and assessment, presentations/projects/seminars) and summative assessment (portfolios, written tests/exams) in the classroom. Formative assessment, providing instant feedback to students, is deemed effective for enhancing learning. PhD scholars also favor formative and alternative assessment techniques, emphasizing the importance of immediate feedback. Summative assessment helps analyze final results, with methods varying among teachers and subjects at higher levels. Students perceive their classroom learning as more comprehensive due to assessment practices. Workshops or courses on classroom assessment practices for faculty members are deemed necessary.

Assessment highlights students' learning weaknesses, enabling teachers to provide better guidance for improved achievement. Effective assessment promotes active student engagement. It provides evidence and a clear picture of learning, motivating students to apply knowledge in new or real-world

contexts. Teacher behavior and cooperation are significant factors positively influencing student achievement.

Recommendations

Based on the results it is recommended that a combination of different assessment methods should be used at PhD level. Training workshops should be organized for teachers to improve their assessment practices. It is recommended that similar studies may be conducted by using observation method for assessing classroom assessment practices in the research degree programs. Further research is also needed for the comparison of classroom assessment experiences of PhD scholars enrolled in different universities across Pakistan.

References

1. Amua-Sekyi, T. E. (2016). Assessment, Student learning and classroom practice: a review. *Journal of Education and Practice*, 7(21), 1-6
2. Awoniyi, F. C. & Fletcher, J. A. (2014). The relationship between senior high school mathematics teacher characteristics and assessment practices. *Journal of Educational Development and Practice*, 4, 21-36.
3. Black, P., & William, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy and Practice*, 5(1), 1-73.
4. Black, P., Harrison, C., Lee, C., Marshall, B., & William, D. (2003). *Assessment for learning: Putting it into practice*. Buckingham, UK: Open University Press
5. Boud, D., & Falchikov, N. (2007). *Rethinking assessment in higher education: Learning for the long term*. New York: Routledge.
6. Chappuis, S., & Stiggins, R. J. (2004). Classroom assessment for learning. *Educational Leadership*, 60, 40-43.
7. Delandshere, G. (2002). Assessment as inquiry. *Teachers' College Record*, 104(7), 1461-1484.
8. Dhindsa, H., Omar, K., & Waldrip, B. (2007). Upper secondary bruneian science students' perceptions of assessment. *International Journal of Science Education*, 29(10), 1281-1280.
9. Dochy, F., Segers, M., Gijbels, D., & Struyven, K. (2007). Assessment engineering: Breaking down barriers between teaching, and learning and assessment. In D. Boud & N. Falchikov (Eds.), *Rethinking assessment in higher education: Learning for the longer term* (pp. 87-100). New York: Routledge
10. Firestone, W. A., & Mayrowetz, D. (2000). Rethinking "high stakes": Lessons from the United States and England and Wales. *Teacher College Record*, 102(4), 724-749.
11. Fletcher, R., Meyer, L., Anderson, H., Johnston, P., & Rees, M. (2012). Faculty and students conceptions of assessment in higher education. *Higher Education*, 64(1), 119-133. <http://doi.10.1007/s10734-011-9484-1>.

12. Glatthorn, A. & Joyner, R. (2005). *Writing the winning thesis or dissertation: A step-by step guide*. Thousand Oaks, CA: Corwin Press
13. Goodwin, A. L. (2000). *Honoring ways of knowing. Equity resource center digest on education assessment*. Newton, MA: Women's Educational Equity Act Resource Center.
14. Heritage, M. (2007). Formative assessment: What do teachers need to know and do? *Phi Delta Kappa*, 89(2), 140-145
15. Herrera, S.G., Murry, K. G., & Cabral, R.M. (2007). *Assessment accommodations for classroom teachers of culturally and linguistically diverse students*. Boston, MA: Pearson Education Inc.
16. Klinger, D.A., & Luce-Kapler, R. (2007). Walking in their shoes: Students' perceptions of large-scale high stakes testing. *The Canadian Journal of Program Evaluation*, 22(3), 29-52.
17. Linn, R. L., & Miller, M. D. (2005). *Measurement and assessment in teaching*. (9th ed.) Upper Saddle River, NJ: Prentice Hall.
18. Madrigal, D., & McClain, B. (2012). *Strengths and weakness of quantitative and qualitative research*. Insight from Research. http://www.uxmatters.com/mt/arc_hives/2012/09/.
19. Merriam, S. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.
20. Meyers, N., & Nulty, D. (2009). How to use (five) curriculum design principles to align authentic learning environments, assessment, students' approaches to thinking and learning outcomes. *Assessment & Evaluation in Higher Education*, 34(5), 565-577. <http://doi.10.1111/j.1745-3992.2003.tb00142.x>
21. Mussawy, J. A, S. (2009). Assessment practices: Student's and teachers' perceptions of classroom assessment (2009). *Master's Capstone Projects*. https://scholarworks.umass.edu/cie_capstones/9
22. Nicol, D. (2009). Assessment for learner self-regulation: Enhancing achievement in the first year using technologies. *Assessment and Evaluation in Higher Education*, 34(3), 335-352.
23. Padilla-Diaz, M. (2015). Phenomenology in educational qualitative research: Philosophy as science or philosophical science?. *International Journal of Educational Excellence*, 1(2), 101-110.
24. Pereira, D., Flores, M., & Niklasson, L. (2015). Assessment revisited: A review of research in assessment and evaluation in higher education. *Assessment & Evaluation in Higher Education*, 30(2), 65-76. <http://doi.10.1080/02602938.2015.1055233>.
25. Pereira. R. D., & Flores. A. M. (2016). Conceptions and practices of assessment in higher education: A study of portuguese university teachers. *Revista Iberoamericana de Evaluación Educativa*, 9 (1), 9-29. <http://doi.10.15366/riee2016.9.1.001>.
26. Pryor, J., & Crossouard, B. (2008). A socio-cultural theorization of formative

- assessment. *Oxford Review of Education*, 34(1), 1-20.
27. Schram, T. H. (2005). *Conceptualizing and proposing qualitative research*. Upper Saddle River, NJ: Merrill Prentice Hall.
28. Scriven, M. (1967). *The methodology of evaluation*. Washington, DC: American Educational Research Association.
29. Simms, M., & George, B. (2014). Approaching assessment from a learning perspective: Elevating assessment beyond technique. *Educational Assessment Evaluation and Accountability*, 26(1), 95-104. <http://doi.10.1007/s11092-013-91768>
30. Singh, S. K G., Lebar, O., Kepol, N., Rahman, A. F., Mukhtar, M. A. K. (2017). An observation of classroom assessment practices among lecturers in selected Malaysian higher learning institutions. *Malaysian Journal of Learning and Instruction*, 14 (1), 23-61.3