ADVANCE SOCIAL SCIENCE ARCHIVE JOURNAL
Available Online: https://assajournal.com
Vol. 05 No. 01. Jan-March 2026.Page#.736-747
Print ISSN: 3006-2497 Online ISSN: 3006-2500
Platform & Workflow by: Open Journal Systems
https://doi.org/10.5281/zenodo.18498054

Understanding Student Learning Outcomes-Based Assessment: Perspectives of Secondary School Teachers in Skardu, Gilgit-Baltistan

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Abstract

This study explores secondary school teachers' perceptions, understanding, and practical experiences with students' learning outcomes-based assessment in Skardu. Guided by a qualitative, phenomenological design, the research focuses on how teachers interpret students' learning outcomes-based assessment, how they apply them in daily classroom practices, and what challenges they face during implementation. Eleven public-school teachers with a minimum of three years of secondary-level teaching experience were selected through purposive sampling from district Skardu. Data were collected using semi-structured interviews conducted in Urdu to ensure comfort and clarity. All interviews were recorded, transcribed, translated, and analyzed using thematic analysis. Findings revealed that most teachers possessed only a partial understanding of SLO-based assessment, with younger teachers showing slightly better awareness due to recent training exposure. Actual classroom practices remain a blend of traditional written exams and emerging activity-based methods. Significant challenges emerged, including large class sizes, weak student readiness, language barriers, limited parental support, lack of training, uneven workload distribution, and restricted technological resources. Teachers emphasized the urgent need for continuous professional development, improved foundational skills at the primary level, accessible teaching resources, smaller class sizes, and better planning support. Overall, the study concludes that although teachers are motivated to implement student learning outcomes-based assessment, successful and consistent application requires systematic

support, capacity-building programs, and strong collaboration among teachers, schools, parents, and policymakers.

Key Words: *Student Learning Outcomes (SLOs), Outcome-Based Assessment, Secondary School, Teacher Perceptions, Assessment Practices, Conceptual Understanding*

Introduction of the Study

Assessment is considered the backbone of education. Traditionally, Pakistan followed an examination system that emphasized rote memorization rather than conceptual understanding and critical thinking (Channa et al., 2023). Recently, the assessment system has shifted toward Student Learning Outcomes (SLO)-based assessment to promote creativity, understanding, and higher-order thinking skills. However, a gap still exists between teaching practices and assessment methods. While classroom instruction aims to develop critical thinking, assessments often continue to focus on memorization.

Teachers in Pakistan largely rely on traditional teaching methods, whereas the new assessment system demands outcome-based instruction and evaluation. Implementing SLO-based assessment is particularly challenging in Skardu, Gilgit-Baltistan, due to limited teacher training, large class sizes, and lack of resources. Previous studies (Channa et al., 2023; Sadiq & Jumani, 2024) highlight that teachers face difficulties in designing outcome-based tasks, preparing rubrics, and providing meaningful feedback. Despite these challenges, teachers show willingness to adopt SLO-based assessment if proper support and training are provided.

Although research has been conducted in other regions of Pakistan, there is limited research on secondary school teachers' perceptions and practices of SLO-based assessment in Skardu. This study aims to fill this gap by exploring teachers' understanding, current practices, and challenges related to SLO-based assessment.

Assessment plays a vital role in improving teaching and learning. Globally, education systems are shifting from traditional examinations to outcome-based assessments that focus on students' skills, knowledge, and understanding (Mahmood, 2021). At the secondary level, SLO-based assessment is crucial as students prepare for higher education and professional life.

Teachers are key to the successful implementation of this system. Their perceptions and attitudes strongly influence classroom assessment practices. If teachers view SLO-based assessment as useful and practical, they are more likely to implement it effectively. Therefore, understanding teachers' readiness, perceptions, and challenges is essential for improving assessment practices.

This study focuses on secondary school teachers in Skardu to identify their experiences with SLO-based assessment. The findings will help improve teacher training, assessment strategies, and educational policies, ultimately benefiting students and the education system (Sohail, 2025).

In 2021, the Federal Board of Intermediate and Secondary Education (FBISE) introduced an SLO-based assessment system to replace traditional content-based examinations (Khan & Bibi, 2025). Although the reform aimed to promote deeper learning, its implementation has created challenges. Many teachers lack adequate training and resources to align their teaching with the new assessment framework (Sadiq, 2024). Moreover, the system was introduced without pilot testing, making adaptation difficult for teachers.

Teachers' perceptions play a critical role in the successful implementation of SLO-based assessment in classrooms. Without a clear understanding of their experiences, challenges, and needs, educational reforms may fall short of their intended outcomes. This study, therefore, aimed to explore secondary school teachers' perspectives on SLO-based assessment, examine

their current assessment practices, and identify the challenges they encounter in applying SLO-based assessment. Specifically, the study sought to answer the following questions:

1. How do secondary school teachers perceive and understand SLO-based assessment?
2. What are the current practices of SLO-based assessment at the secondary level?
3. What challenges do teachers face in implementing SLO-based assessment?

This study is significant for teachers, students, administrators, curriculum developers, and policymakers. It will help teachers improve lesson planning, assessment design, and feedback practices. Administrators and policymakers can use the findings to enhance teacher training programs and assessment policies. The study also contributes to academic literature by providing localized insights from Skardu and supports efforts toward achieving Sustainable Development Goal 4 (Quality Education).

Limitations of the Study The study is limited to public secondary schools in Skardu, Baltistan, with high academic performance. The small sample size and qualitative nature of the research may limit generalization. Data is based on teachers' self-reported perceptions, which may involve personal bias. The study does not include the perspectives of students, parents, or administrators.

The study focuses only on secondary school teachers working in FBISE-affiliated public schools in Skardu with at least three years of teaching experience. It is confined to qualitative semi-structured interviews to gain in-depth understanding of SLO-based assessment practices.

Literature Review

The Student Learning Outcomes (SLO) evaluation cycle provides a structured process for planning, monitoring, and assessing student achievement (Monahan et al., 2011). It begins with the development of clear SLOs by teachers, which are reviewed and approved by evaluators using rubrics or checklists to ensure consistency. Progress is monitored throughout the academic year through midyear reviews, where necessary instructional adjustments are made. At the end of the course, student performance data is analyzed to determine the level of SLO achievement. This systematic cycle helps improve teaching practices and ensures accountability in assessment.

Understanding Student Learning Outcomes Student Learning Outcomes are clear statements describing what learners should know and be able to do after completing a course or program (Fan, 2020). SLOs emphasize knowledge, skills, attitudes, and practical application rather than memorization. They serve as a framework for curriculum planning, teaching, and assessment.

Teachers' perceptions play a key role in the successful implementation of SLOs. Positive perceptions encourage effective use of outcome-based assessment, whereas negative attitudes may hinder its application (Sadiq, 2024). Research shows that teachers' educational background, training, and experience significantly influence how they understand and implement SLO-based assessments.

Internationally, organizations such as OECD and PISA use SLO-based frameworks to evaluate student performance and educational quality. These initiatives highlight the global importance of outcome-based education and assessment (Zhang, 2016).

The concept of learning outcomes has roots in behaviorist theories of the 19th and 20th centuries, which emphasized measurable and observable learning results (Adam, 2006). Over time, outcome-based education expanded in countries such as Australia, New Zealand, South Africa, and the UK, where it became central to curriculum development (Hejazi, 2011). The SLO approach brought clarity, precision, and accountability to teaching and assessment systems worldwide.

Many developed countries have successfully integrated SLO-based assessment into their education systems. Large-scale international assessments such as PISA and TIMSS use outcome-based measures to compare student achievement across nations (Agir et al., 2023). These systems emphasize critical thinking, problem-solving, and real-world application of knowledge, reflecting modern educational priorities.

In Pakistan, the Federal Board of Intermediate and Secondary Education (FBISE) introduced SLO-based assessment in 2021 under the National Curriculum of Pakistan 2022–23. The new framework aims to shift assessment from rote learning to conceptual understanding (Iqbal et al., 2019). However, teachers face challenges such as lack of training, limited resources, large classes, and insufficient guidance in designing SLO-aligned tasks. These issues affect the effective implementation of the system.

Developing meaningful SLOs requires clarity, measurability, and alignment with curriculum goals (Iqbal et al., 2019). Stakeholder involvement—including teachers, administrators, and students—is essential for creating relevant and achievable outcomes. Research emphasizes that successful SLO development depends on collaboration, continuous feedback, and data-driven planning (Sohail, 2025).

SLOs guide instruction and assessment by clearly defining expected learning achievements (Channa et al., 2023). They help teachers plan lessons, measure student progress, and improve instructional practices. SLOs also enable administrators to evaluate teacher effectiveness and overall educational quality (Iqbal et al., 2019). Outcome-based assessment promotes student-centered learning and supports continuous improvement in education.

Teacher training is critical for successful SLO-based assessment. Studies indicate that teachers need professional development to design outcome-based tasks, align instruction with SLOs, and provide effective feedback (Khan et al., 2024). Without adequate training, teachers tend to rely on traditional assessment methods, limiting the impact of SLO reforms.

SLO-Based Assessment despite its benefits, faces several challenges. Common difficulties include lack of teacher training, resistance to change, limited resources, overcrowded classrooms, and insufficient time for planning and feedback (Khan & Bibi, 2025). These challenges are particularly evident in developing regions such as Gilgit-Baltistan, where institutional support is limited.

Teachers are central to the success of SLO-based assessment. They design learning activities, align instruction with outcomes, and evaluate student progress (Saad, 2018). Effective implementation depends on teachers' understanding, attitudes, and skills. Research shows that positive teacher perceptions lead to better classroom practices and improved student outcomes (Khan et al., 2024).

This study is grounded in constructivist learning theory and Bloom's Taxonomy. Constructivist learning theory asserts that learners build knowledge through active engagement, experiences, and reflection, which supports the use of outcome-based assessment focused on meaningful learning rather than memorization (Fosnot & Perry, 2005). Bloom's Taxonomy provides a hierarchical classification of cognitive processes from remembering and understanding to applying, analyzing, evaluating, and creating—which guides the formulation of SLOs and helps teachers design assessments that target progressively higher-order thinking skills (Krathwohl, 2002). Together, these theoretical perspectives emphasize alignment between curriculum, instruction, and assessment and offer a strong foundation for understanding teachers' perceptions and practices of SLO-based assessment.

The literature indicates that SLO-based assessment is a globally recognized approach aimed at improving learning quality. However, its success largely depends on teachers'

understanding, classroom practices, and institutional support. In Pakistan, especially at the secondary level, limited training and resources pose significant challenges. This review highlights the need to explore teachers' perceptions and practices of SLO-based assessment in the study area, which forms the focus of the present study.

Methodology

This study employed a qualitative research method to explore secondary school teachers' perceptions of SLO-based assessment in Skardu. A qualitative approach was selected because it allows an in-depth understanding of participants' experiences, attitudes, and viewpoints through non-numerical data such as narratives and personal accounts (Mills et al., 2015). The study used a phenomenological research design to examine teachers' lived experiences and challenges in implementing outcome-based assessment (Creswell, 2012).

The population of the study consisted of secondary school teachers from public schools in Skardu, Baltistan (Gall et al., 2007). Participants were selected through purposive sampling, which enabled the researcher to intentionally choose teachers who had at least three years of teaching experience at the secondary level (Creswell, 2012). Semi-structured interviews were used as the main research instrument because they provide flexibility and allow participants to express their views openly and in detail.

Data were collected through individual face-to-face interviews with teachers. Permission was obtained from school heads before conducting the interviews. The interviews were conducted in Urdu to avoid language barriers and were audio-recorded with the consent of participants. A quiet and comfortable environment was arranged to ensure smooth and uninterrupted data collection. The recorded interviews were later transcribed and translated into English for analysis.

Thematic analysis was used to analyze the qualitative data. Interview transcripts were carefully examined to identify recurring themes, patterns, and ideas related to teachers' understanding, practices, and challenges regarding SLO-based assessment (Terry et al., 2017).

Ethical considerations were strictly observed throughout the study. Informed consent was obtained from all participants, and they were informed about the purpose and nature of the research. Participation was voluntary, and confidentiality of data was ensured. Permission from relevant institutional authorities was also obtained prior to data collection.

Findings of the Study

The findings of the study are presented according to the three research questions. Data were analyzed thematically from semi-structured interviews with secondary school teachers in Skardu.

Secondary School Teachers Perceive and Understand SLO-Based Assessment

Limited Conceptual Understanding of SLO-Based Assessment. The majority of teachers demonstrated only a partial understanding of SLO-based assessment. Although they were familiar with the term, many were unclear about its practical application. Teachers frequently described SLOs as "a new system" that they were still trying to understand. One participant stated: "We know that SLO-based assessment focuses on students' learning, but we are not fully trained on how to implement it step by step." (Interview 2)

Younger teachers with recent B.Ed. or AD qualifications showed relatively better awareness than senior teachers who had limited exposure to modern assessment approaches. This supports earlier research indicating that teachers' assessment literacy depends largely on professional preparation and training (Biggs et al., 2022).

Perception of SLOs as Student-Centered and Competency-Based. Despite limited technical knowledge, most teachers viewed SLO-based assessment positively. They believed it

promotes student-centered learning and moves assessment beyond rote memorization. A teacher explained:

> SLO-based assessment checks whether students truly understand and can apply knowledge instead of only memorizing textbook lines. It emphasizes teaching with purpose, using tools like technology and activities to achieve targeted outcomes, and regularly assessing student progress toward those goals (Interview 10)

This aligns with the literature emphasizing that outcome-based assessment encourages deeper conceptual learning and higher-order thinking (Darling-Hammond, 2012).

Focus on Understanding Rather Than Memorization. Teachers strongly perceived SLO-based assessment as a shift from traditional knowledge recall to understanding and application. One respondent shared:

> In SLO-based assessment, the focus is on understanding and application, not just knowledge. In our paper, 20% of questions are knowledge-based, 50% test understanding, and 30% require application. Unlike previous exams that focused only on memorizing the textbook, SLOs show how well students comprehend the topic and can apply it in real life. (Interview 9)

Such perceptions are consistent with studies that highlight SLOs as tools for promoting meaningful and applied learning (Groenier et al., 2025).

Current Practices of SLO-based Assessment

Reliance on Informal Learning Sources. Most teachers reported that they learned about SLOs through informal channels such as social media, colleagues, and personal research rather than structured professional development. One teacher noted: “We did not receive formal training. We learned about SLOs mainly from Facebook, WhatsApp groups, and online searches.” (Interview 3)

This finding supports research showing that in the absence of institutional training, teachers rely on self-directed learning to build assessment knowledge (Genesee, 2022).

Blended Use of Traditional and Modern Assessment Methods. Teachers reported using a mixture of traditional written exams and modern activity-based assessments. Common methods included quizzes, worksheets, presentations, and classroom questioning. As one participant explained: “My assessment methods depend on the topic. Sometimes I use written exams; other times I use activities and projects.” (Interview 2)

Literature also confirms that effective SLO implementation requires multiple assessment methods rather than a single testing approach (Guo et al., 2020).

Designing Assessments Linked to Learning Outcomes. Many teachers stated that they attempt to design assessments aligned with lesson objectives using rubrics and criteria. A teacher commented: “I create rubrics and plan questions according to the learning outcomes and cognitive levels.” (Interview 5)

This practice is supported by research emphasizing the importance of structured, criteria-based assessment for measuring SLO achievement (Colton & Covert, 2007).

Feedback as a Core Practice. Teachers highlighted verbal and motivational feedback as an essential part of SLO assessment. They frequently guide students individually and involve parents when necessary. One teacher said: “We call students one by one, discuss their strengths and weaknesses, and motivate them to improve.” (Interview 4)

This reflects findings that constructive feedback strengthens student learning and self-reflection (Kamran, 2024).

Challenges Do Teachers Face in Implementing SLO-Based Assessment

Lack of Formal Training and Professional Development. The most frequently reported challenge was insufficient training. Teachers felt unprepared to implement SLOs effectively. One participant stated:

> The SLOs based assessment system was introduced suddenly, and we have not received any training on how to implement student learning outcome-based assessment. As a result, we are unsure how to use it effectively to improve student learning. (Interview 5)

Research similarly emphasizes that successful SLO implementation depends on continuous professional development and institutional support (Tabassum et al., 2022).

Student Readiness and Language Barriers. Teachers reported that weak student comprehension and language difficulties hinder SLO implementation. A respondent explained:

> The biggest challenge in implementing SLO-based assessment is language. Most students do not have Urdu or English as their mother tongue, so they often struggle to fully understand the questions, which makes it difficult for them to demonstrate their learning outcomes (Interview 2)

Studies confirm that linguistic limitations and low academic preparedness negatively affect outcome-based assessments (Darling-Hammond, 2012).

Large Class Sizes and Mixed Ability Levels. Overcrowded classrooms and diverse learning levels were identified as major barriers. Teachers found it difficult to address individual needs within large classes. As one teacher stated:

> With 50 to 60 students in one class, it is almost impossible to conduct proper SLO activities. I cannot give individual attention, monitor each student's understanding, or provide meaningful feedback. The differences in students' abilities make it even harder to implement outcome-based tasks effectively, and I often feel that some students fall behind while others are not sufficiently challenged. (Interview 9)

This finding is supported by research identifying class size and student diversity as key constraints in outcome-based assessment systems (Asim et al.,2021).

Limited Parental Support. Teachers repeatedly emphasized minimal parental involvement as a serious obstacle. One participant remarked: "Parents show zero involvement. Students spend hours at home without studying, and we get no support." (Interview 10)

Literature strongly links parental engagement with improved student learning outcomes (Hornby & Lafaele, 2023).

Limited Technology Skills and Resources. Teachers also reported inadequate technological skills and lack of resources as barriers to modern assessment practices. One teacher shared:

> We need technology and proper training to use digital tools for SLO assessments. Without access to computers, software, or reliable internet, it is very difficult to design interactive assessments. Even if the tools are available, we are not trained to use them effectively, so implementing SLO-based evaluation becomes a challenge, and students cannot fully benefit from modern assessment methods. (Interview 1)

Previous studies highlight that technological readiness is essential for effective contemporary assessment systems (Mankins, 2009).

Summary of the Findings

The findings reveal that secondary school teachers in Skardu generally hold positive attitudes toward SLO-based assessment but possess limited practical understanding due to lack of formal training. Current practices show a blend of traditional and modern assessment methods, with increasing efforts to align tasks with learning outcomes. However, effective implementation is constrained by multiple challenges, including insufficient professional

development, large class sizes, weak student readiness, language barriers, limited parental involvement, and inadequate technological support.

Overall, the study indicates that while teachers recognize the value of SLO-based assessment for improving student learning, meaningful implementation requires structured training, institutional support, smaller classes, and stronger collaboration among teachers, parents, and administrators.

Discussions

The findings of this study indicate that secondary school teachers in Skardu generally hold a positive attitude toward Students' Learning Outcomes (SLO)-based assessment; however, their understanding of the concept remains largely limited and theoretical. Although most teachers were familiar with the term SLOs, many lacked practical knowledge regarding how to design, implement, and evaluate outcome-based assessments in real classroom situations. This suggests that the transition from traditional assessment practices to SLO-based assessment has not yet been fully integrated at the classroom level. Similar research has shown that teachers often conceptually support outcome-based assessment but face difficulties in applying it due to inadequate training and professional guidance (Biggs et al., 2022; Asamoah et al., 2024).

Despite these limitations, teachers in this study perceived SLO-based assessment as a constructive and progressive approach that promotes conceptual understanding, critical thinking, and the application of knowledge rather than rote memorization. They believed that this system has the potential to enhance student learning and improve classroom practices. These perceptions align with contemporary educational research, which emphasizes that outcome-based assessment encourages deeper learning and student-centered instructional practices (Darling-Hammond, 2012; Genesee, 2022). The study further revealed that younger and recently qualified teachers demonstrated comparatively better awareness of SLO-based assessment than senior teachers, indicating that recent teacher education programs are more aligned with modern assessment frameworks and pedagogical reforms.

In terms of current classroom practices, the findings revealed that teachers are making efforts to implement SLO-based assessment; however, these efforts remain largely informal and inconsistent. Most teachers reported that they learned about SLOs through social media, peer discussions, and personal exploration rather than through structured professional development programs. Consequently, assessment practices often reflect a blend of traditional examinations and modern methods such as quizzes, presentations, and classroom activities. Although this demonstrates a gradual movement toward diversified assessment, the dominance of conventional testing practices continues to limit the effective application of SLO principles. Previous studies similarly highlight that successful SLO implementation requires the use of continuous formative assessment and multiple evaluation strategies (Guo et al., 2020; Makhmetova et al., 2025).

The study also identified several significant challenges that hinder the effective implementation of SLO-based assessment. The most critical issue reported by teachers was the lack of formal training and institutional support. Teachers expressed that SLO-based assessment was introduced without sufficient preparation, leaving them uncertain about how to align their teaching methods and assessment practices with learning outcomes. This finding supports earlier research that identifies professional development as a fundamental requirement for the success of educational reforms (Hamilton et al., 2009; Frontiers in Education, 2022). Additional challenges included large class sizes, students' weak academic foundations, language barriers, limited parental involvement, and inadequate technological resources. These constraints make it difficult for teachers to implement activity-based learning, provide individualized feedback,

and conduct meaningful assessments. Similar contextual barriers have been reported in studies focusing on outcome-based education in developing educational systems (Garcia & Weiss, 2019; DNA News Pakistan, 2025).

Overall, the discussion demonstrates that while teachers recognize the value and potential benefits of SLO-based assessment, its effective implementation is constrained by systemic and contextual limitations. A clear gap exists between policy expectations and actual classroom realities. Without comprehensive teacher training, adequate resources, and institutional support, the intended goals of SLO-based assessment cannot be fully realized. The study therefore emphasizes the urgent need for continuous professional development programs, improved technological and instructional resources, and stronger collaboration among teachers, administrators, and policymakers to make SLO-based assessment more practical, sustainable, and effective at the secondary school level.

Conclusion

The study concludes that secondary school teachers in Skardu hold generally positive views toward Students' Learning Outcomes (SLO)-based assessment and recognize its potential to improve conceptual understanding, critical thinking, and student-centered learning. However, their practical understanding and implementation of SLO-based assessment remain limited due to insufficient training, lack of structured professional support, and various classroom challenges. Teachers are gradually adopting modern assessment practices, yet traditional examination methods still dominate.

Major barriers such as large class sizes, language difficulties, limited parental involvement, and inadequate resources further restrict effective implementation. The study highlights that successful adoption of SLO-based assessment requires continuous teacher training, institutional support, access to technological and instructional resources, and stronger collaboration among stakeholders. Addressing these issues can help bridge the gap between policy expectations and classroom realities, leading to more meaningful and effective assessment practices at the secondary level.

Recommendations

- Provide continuous, practical training for teachers on designing, implementing, and evaluating SLO-based assessments.
- Strengthen students' foundational skills, particularly in language, comprehension, and basic concepts.
- Ensure access to technology and digital tools, along with training for teachers to use them effectively in assessments.
- Increase parental and community engagement through awareness programs to support learning at home.
- Conduct diagnostic assessments during admissions to group students by learning levels for tailored instruction.
- Promote teacher collaboration, equitable workloads, and structured administrative support to facilitate SLO-based assessment implementation.

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