Reconceptualizing Assessment Practices in Higher Education: A Shift from Time-Based to Skill-Based Evaluation at Lasbela University (Balochistan)

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Abstract

This study investigates the transition from traditional time-based assessment (TBA) to skill-based assessment (SBA) in higher education, using Lasbela University of Agriculture, Water and Marine Sciences (LUAWMS), Uthal, Balochistan, as a case study. The research addresses the gap in Pakistan's higher education assessment mechanisms, where rote learning dominates evaluation models. Employing a mixed-methods research design grounded in pragmatism, data were collected through quantitative surveys (N=100 undergraduate students) and semi-structured interviews (N=10 faculty members). Findings reveal that while time-based assessment shows a moderate positive correlation with learning proficiency ($r=0.418$, $p<0.01$), skill-based assessment demonstrates a significantly stronger relationship with learning outcomes ($r=0.633$, $p<0.01$). Assessment design and format strongly predict students' learning experiences ($r = 0.773$, $p < 0.01$). Qualitative findings highlight institutional challenges, including inadequate infrastructure, limited faculty training, and the absence of policy frameworks supporting SBA implementation. Faculty members expressed a preference for SBA to reform teaching and learning practices aligned with global higher education standards. The study proposes a strategic model for implementing skill-based assessments tailored to local educational and socioeconomic contexts. Theoretical contributions include advancing competence-based education frameworks for postgraduate assessment, while practical implications inform policy measures for modernising assessment systems in Pakistani higher education institutions.

Keywords: Skill-based Assessment, Time-based Assessment, Higher Education, Competency-Based Education, Assessment Reform.

Introduction

The global education landscape has witnessed a paradigm shift from traditional, time-bound assessment systems to competency-based, skill-oriented evaluation frameworks. Competence-based education has gained international recognition for its capacity to shape student learning performance through more effective assessment models that foster professional skills, self-directed learning, and real-world problem-solving (Wesselink et al., 2007). This transformation has particularly influenced higher education systems across European countries, enabling a

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dynamic, broad-based vision of education that emphasises lifelong learning and authentic assessment practices (Van Merrienboer et al., 2024).

In contrast, higher education institutions in developing countries, particularly Pakistan, continue to rely predominantly on time-based assessment systems that prioritise memorisation and content coverage over skill development. This traditional approach, characterised by fixed examination schedules and rote learning, produces graduates with high grades but limited practical competencies (Ahmed et al., 2013). The disconnect between academic achievement and workplace readiness has become increasingly problematic in an era where digital literacy and artificial intelligence are revolutionising every sector, including education.

Balochistan is Pakistan's largest province by area, but is the least well served in terms of educational infrastructure. This presents unique challenges for assessment reform. Lasbela University of Agriculture, Water and Marine Sciences (LUAWMS), Uthal, as a public sector institution, exemplifies the tension between traditional assessment practices and the demand for competency-based evaluation. The university's assessment system, like most Pakistani higher education institutions, remains anchored in time-based models. This persists despite evidence that skill-based assessment enhances mental abilities, critical thinking, and self-directed learning (Yasmin et al., 2019).

Understanding the difference between performance-based (time-based) and competency-based (skill-based) assessments is key to this challenge. Performance-based assessment measures learning within time limits, while competency-based assessment integrates knowledge, skills, and attitudes for holistic development (Fastre et al., 2010). Research shows relevant frameworks enhance both task performance and self-assessment, supporting effective learning and professional competence (Fastre et al., 2010).

Pakistan's higher education sector has made intermittent efforts to modernise assessment practices, yet systemic barriers persist. These include teacher-centred pedagogical traditions, limited faculty development opportunities, inadequate infrastructure, and the absence of policy frameworks supporting assessment innovation (Murtaza & Hui, 2021). The result is a persistent gap between the skills graduates possess and those employers and global professional standards demand.

Research Objectives

This study aims to address the gap between traditional and modern assessment systems in Pakistani higher education through the following objectives:

- To investigate the challenges and opportunities associated with teaching practices and student learning in transitioning from time-based to skill-based assessment at LUAWMS Uthal.
- To analyse the effectiveness of current educational practices at LUAWMS Uthal in supporting skill-based assessment.
- To design a strategic model for implementing skill-based assessments tailored to the needs of LUAWMS Uthal, considering local educational and socioeconomic factors.

Research Questions and Hypotheses

Research Questions

- What challenges and opportunities exist for teaching and learning when transitioning from time-based to skill-based assessment at LUAWMS Uthal?
- How effective are the current educational practices at LUAWMS Uthal in supporting skill-based assessment?
- What strategic model can be designed to implement skill-based assessment at LUAWMS Uthal, taking into account local educational and socioeconomic factors?

Research Hypotheses

H1: Time-based assessment significantly influences undergraduate students' learning proficiency.

H2: Skill-based assessment significantly affects student learning in undergraduate classrooms.

H3: There is a significant difference in faculty teaching practices between time-based and skill-based assessment.

Literature Review

Pakistan's higher education sector has historically relied on traditional assessment systems, yet a growing movement seeks alignment with modern competency-based approaches. Universities including LUAWMS Uthal, Balochistan, predominantly adhere to time-based assessment mechanisms, resulting in a disconnect between high grades and practical skills. The integration of skill-based assessment methods is crucial for enhancing the efficacy and relevance of higher education today. Higher education institutions in Pakistan, especially those in Balochistan, urgently require innovative evaluation models that meet international standards. The adoption of digital assessment tools and technology-driven learning models offers opportunities for more engaging, personalized, and globally competitive learning processes (García-Peñalvo et al., 2021). Yet, such innovations remain underutilized in many Pakistani universities. Therefore, a critical review of prior research, assessment frameworks, and educational theories is essential to inform the transition from time-based to skill-based assessment models.

Assessment Systems: Challenges and Opportunities

Time-based assessment (TBA) remains prevalent in Pakistan's Higher Education Institutions (HEIs), with courses structured around fixed examinations that prioritize information recall over practical development. In contrast, skill-based models equip students with competencies applicable in real-life situations. HEIs face challenges integrating skill-based approaches into mainstream curricula, as the current system promotes rote learning and memorization for examinations. Skill-based education fosters learners' hidden abilities, encouraging discovery, critical analysis, and the development of individual viewpoints. Studies indicate that skill-based assessment enhances employment rates compared to traditional approaches, as industries increasingly value technical skills over grades. The Organization for Economic Cooperation and Development (OECD, 2020) advocates developing systems with new skills approaches to achieve a global perspective, motivating students and engaging faculty through effective use of AI. Shepard et al. (2018) emphasize that new skills approaches in assessment provide global perspectives while keeping faculty engaged. Cox, Bown and Burdis (2015) note that proficiency-based assessment integrates various methods to accommodate diverse learning styles, while Ahmed et al. (2022) reiterate that competency-based assessments enable teachers to consider cultural, emotional, and social factors.

Implementing skill-based assessment faces significant hurdles. Ahmed et al. (2022) identify difficulties integrating skill-based approaches into curricula prioritizing rote learning, raising critical policy-making issues. The OECD (2020) emphasizes testing theoretical approaches against real-life situations, suggesting competency-based education projects should incorporate modern systems including virtual assessment models. Saif et al. (2023) suggest that proper implementation of skill-based approaches yields more practical assessment mechanisms and skilled human resources. Siddique et al. (2020) provide evidence that skill-based assessments align better with real-world skills, preparing students for professional demands and improving learning retention. Addressing these challenges requires proper policy frameworks, curriculum transformation, and updated teaching pedagogies. Skill-based assessment holds particular promise for rural contexts like Uthal, Balochistan. Irfan et al. (2024) highlight its contribution

to teaching and learning processes. Haider, Siddiqui, and Ali (2023) emphasize that integrating Skill-Based Assessment can empower students to solve real-life problems, fostering self-employment and financial stability.

Performance-Based and Competence-Based Assessment Criteria

Performance-based assessment has emerged as a crucial tool for evaluating graduate-level skills and competencies. Unlike conventional time-constrained methods that gauge memorization and reproduction, performance-based assessment focuses on students' application of acquired knowledge in real-life scenarios (Timmerman et al., 2013). This approach integrates theoretical understanding with practical skills, offering accurate estimation of professional readiness. In graduate education, critical thinking, problem-solving, research, and independent learning skills are fostered through projects, presentations, case analyses, and reflective practices (Feldon et al., 2015). However, implementation of performance-based evaluation in Pakistani higher education remains sparse, contributing to rote learning and disconnect between knowledge and practical skills. Digital technology can effectively support assessment through online presentations, e-portfolios, and virtual learning (Hancock, 2007), yet requires faculty training, curriculum updates, and technological infrastructure (Gallardo, 2020).

Competency-Based Education (CBE) provides a foundational framework for assessing student progress by integrating knowledge, skills, behaviors, and attitudes, thereby enhancing real-world learning. The adoption of CBE introduces standardized assessment foundations, emphasizing criterion-referenced evaluation and promoting professional needs. Transforming assessment models requires addressing rote memorization and focusing on skill development and behavioral change among learners (Wesselink et al., 2007; Biemans et al., 2004). Performance-based and competence-based criteria form a complementary continuum. Performance-based standards support early learning through structured tasks, while competence-based criteria promote advanced, integrative thinking (Fastré et al., 2010; Wesselink et al., 2007). Open assessment models standardize learning and guide academic achievement (Fastré et al., 2010). The socio-economic realities of students' future employment must be reflected in competence-based criteria (Pervaiz et al., 2020). European institutions collaborate with industries to design standards reflecting workplace challenges (Van Merriënboer & Sluijsmans, 2009), a strategy LUAWMS could adopt by partnering with local agricultural cooperatives or marine conservation groups.

Theoretical and Conceptual Foundations

This study draws upon four key theoretical concepts. Competence-Based Education (CBE) emphasizes integration of knowledge, skills, and attitudes in educational processes (Wesselink et al., 2007). Cognitive Load Theory (Kalyuga, 2007) explains how novice learners benefit from structured, performance-based criteria while advanced learners thrive under holistic, competence-based criteria. Authentic Assessment Theory (Gulikers et al., 2008; Fastré et al., 2010) proposes reflective evaluation models fostering professional growth through real-life practice integration. Educational Change Theory (Fullan, 2007) guides systematic institutional reform addressing cultural, resource, and training challenges. These theoretical foundations can inform policy modification and assessment integration across university departments, serving as a model for systematic reform in Balochistan's higher education context.

Following this review, a conceptual framework was developed positing that modern assessment techniques, including skill-based assessment and varied assessment designs, lead to improved student competencies, increased self-directed learning, and greater faculty involvement. The framework aims to achieve institutional reforms, enhance graduate employability, and policy alignment with global criteria, ensuring sustainable educational development at LUAWMS.

Methodology

Research Design

This study employed a mixed-methods research design guided by the philosophy of pragmatism. Mixed-methods research combines quantitative and qualitative approaches to collect and analyse data, enabling a deeper and more comprehensive understanding of the transition from time-based to skill-based assessment at LUAWMS. Pragmatism was selected as the philosophical foundation because it focuses on solving real-world problems by selecting methods that best address research questions, rather than being tied to specific methodological traditions (Prasad, 2021; Kaushik & Walsh, 2019).

The study applied both inductive and deductive reasoning approaches. The inductive approach explored new facts and knowledge through qualitative tools, such as interviews, to examine experiences and patterns in assessment practices. The deductive approach investigated existing knowledge through quantitative tools, testing hypothetical patterns and measuring attitudes toward assessment frameworks.

Population and Sampling

The target population included faculty members and undergraduate students from social sciences and humanities disciplines at LUAWMS, Uthal, Balochistan. A non-probability sampling method was employed, utilising purposive sampling techniques to access the most relevant participants.

For the quantitative component, stratified purposive sampling was used to develop three strata: Education, Social Sciences, and Management Sciences. The sample comprised 100 undergraduate students enrolled in their 6th to 8th semesters, ensuring participants had sufficient exposure and experience to provide relevant data on assessment practices.

For the qualitative component, purely purposive sampling was employed based on expertise. Ten faculty members (including two academic heads) with at least 5 years of teaching experience at LUAWMS were selected to participate in semi-structured interviews. This experience criterion ensured participants' familiarity with institutional assessment strategies and learner competencies.

Instruments and Measures

Survey Questionnaire: A structured questionnaire using a five-point Likert scale (1=strongly disagree to 5=strongly agree) was developed to collect quantitative data from undergraduate students. The instrument comprised five constructs: Time-based assessment (5 items), skill-based assessment (5 items), different forms of assessments (5 items), learning proficiency (5 items), and students' learning experiences (5 items). The questionnaire explored students' experiences with time-based assessments, perceptions of the efficiency of current methods in developing relevant skills, expectations from skill-based assessments, and willingness to engage in self-directed learning.

Semi-Structured Interviews: An interview protocol was developed to gather qualitative data from faculty members, exploring institutional challenges, faculty views, and strategies for implementing skill-based assessments. The semi-structured format provided a balance between flexibility and focus, allowing the interviewer to follow a prepared guide while probing deeper into participants' responses.

Data Collection Procedure

Quantitative data collection involved administering the survey questionnaire in person to 100 undergraduate students from social sciences and humanities disciplines. The self-administration method ensured high response rates and clarity for participants. Data were

collected using Google Forms and paper-based questionnaires, depending on participants' accessibility and preference.

Qualitative data collection involved semi-structured in-person interviews with faculty members and academic heads. Interviews were recorded for participants who gave permission; for those who declined, detailed notes were taken. All participants provided informed consent before data collection, and confidentiality was assured throughout the process.

Data Analysis

Quantitative Analysis: Survey data were analysed using SPSS (latest version). Descriptive statistics (percentages and frequencies) were calculated for demographic information. Reliability analysis employed Cronbach's Alpha to assess the internal consistency of all constructs. Pearson r correlation and linear regression analyses tested research hypotheses examining relationships between independent variables (assessment types) and dependent variables (learning outcomes). Statistical significance was set at $p < 0.05$.

Qualitative Analysis: Semi-structured interview data were analysed using thematic analysis. Manual coding was employed to develop codes, categories, and major themes, with sub-themes generated to effectively analyse faculty members' thoughts, opinions, perspectives, and experiences. Themes were interpreted in relation to research objectives and existing literature.

Limitations and Bias Control

This study acknowledges several limitations. First, generalizability is limited as the research focused on undergraduate students and teachers at a single institution (LUAWMS Uthal). Second, the study examined only two forms of assessment systems (time-based and skill-based), potentially excluding hybrid or technology-integrated approaches. Third, data collection was limited to students and faculty, excluding administrative stakeholders whose perspectives might influence assessment policy. Fourth, the cross-sectional design cannot address the long-term impacts of assessment mechanisms on learning processes. Fifth, the study did not examine technology integration in assessment practices.

To control bias, standardised instruments with established reliability were employed, multiple data sources were triangulated, and ethical protocols, including informed consent and confidentiality, were strictly followed.

Results

Descriptive Results

Demographic Characteristics

The sample comprised 100 undergraduate students from LUAWMS. The gender distribution was 61% male respondents, 38% female respondents, and 1% identifying as other or preferring not to disclose. The age distribution indicated that 45% of respondents were aged 21-23, the largest age group. Departmental representation included 45% from Education, 43% from Social Sciences, and 12% from other academic disciplines. The educational qualification distribution showed that 55% of respondents were in their 7th semester, 30% in their 8th semester, and 15% in their 6th semester.

Reliability Analysis

Cronbach's Alpha coefficients for all constructs exceeded the acceptable threshold of 0.70 (George & Mallery, 2003):

Table 1: Reliability Analysis

Construct	Items	Cronbach's Alpha
Time-based Assessment	5	0.813
Skill-based Assessment	5	0.881
Different Forms of Assessments	5	0.856
Learning Proficiency	5	0.788
Students' Learning Experiences	5	0.823
Total Scale	25	0.832

These values indicate excellent internal consistency and reliability of the measurement instruments.

Correlation Analysis

Hypothesis 1: Time-based Assessment and Learning Proficiency

Spearman's rho correlation revealed a moderate positive relationship between time-based assessment (TBA) and learning proficiency (LP), with $r = 0.391$ and $p < 0.01$. This indicates that as the use of time-based assessments increases, students' learning outcomes improve to a moderate extent. However, the correlation's intensity is less than that observed for skill-based assessment, suggesting that TBA influences academic performance but may not represent the most productive approach.

Hypothesis 2: Skill-based Assessment and Learning Proficiency

A substantially stronger correlation emerged between skill-based assessment (SBA) and learning proficiency, with $r = 0.633$ and $p < 0.01$. This strong positive statistical association demonstrates that skill-based assessment significantly enhances student learning outcomes. The finding supports the argument that competency-based approaches, emphasizing knowledge application and practical skills, produce superior learning results compared to time-bound traditional methods.

Hypothesis 3: Different Forms of Assessment and Student Learning Experiences

The strongest correlation was observed between different forms of assessment (DFoA) and students' learning experiences (SLE), with $r = 0.727$ and $p < 0.01$. This robust relationship indicates that well-designed, properly formatted assessments significantly enrich students' learning experiences. The clarity, structure, and relevance of assessment design play crucial roles in how students perceive and engage with academic tasks.

Table 2: Summary of Correlation Results

Variable Relationship	Spearman Correlation (r)	p-value
TBA → LP	0.391	<0.01
SBA → LP	0.633	<0.01
DFoA → SLE	0.727	<0.01

Regression Analysis

Model 1: TBA → LP

Regression analysis showed $R = 0.418$, $R^2 = 0.175$, indicating that time-based assessment accounts for 17.5% of the variance in learning proficiency. The standardized beta coefficient ($\beta = 0.418$) and t-value (4.560) were statistically significant ($p < 0.001$), confirming that TBA positively but modestly predicts learning outcomes.

Model 2: SBA → LP
This model demonstrated substantial improvement with R = 0.644, R^2 = 0.414, indicating that skill-based assessment explains 41.4% of the variance in learning proficiency. The larger beta coefficient (β = 0.644) and t-value (8.325) were highly significant ($p < 0.001$), confirming SBA's strong positive influence on learning outcomes.

Model 3: DFoA → SLE
The strongest model showed R = 0.773, R^2 = 0.598, indicating that assessment design and format account for 59.8% of the variance in student learning experiences. The beta coefficient (β = 0.773) and t-value (12.078) were highly significant ($p < 0.001$), emphasizing the critical importance of assessment structure in shaping learner engagement.

Table 3: Summary of Regression Results

Model	R	R^2	Beta	F	p-value
TBA → LP	0.418	0.175	0.418	20.794	<0.001
SBA → LP	0.644	0.414	0.644	69.310	<0.001
DFoA → SLE	0.773	0.598	0.773	145.877	<0.001

Hypothesis Testing Summary
All three hypotheses were accepted at $p < 0.05$, confirming that:
H1: Time-based assessment significantly influences undergraduate students' learning proficiency
H2: Skill-based assessment significantly affects student learning in undergraduate classrooms
H3: Different forms of assessment significantly influence students' learning experiences

Qualitative Findings
Theme 1: Viewpoints on Assessment Frameworks: Obstacles and Prospects
Faculty interviews revealed multiple challenges in transitioning to skill-based assessment. Administrative constraints emerged as a primary barrier, including a lack of assessment reforms and inadequate resources. Participants noted the absence of updated policies and formal strategies to support new assessment methods, as well as shortages of infrastructure, practical labs, and assessment materials.
Lack of faculty training was another key issue. Faculty reported limited exposure to skill-based assessments and rare professional development opportunities. One lecturer said, "Our lack of a definite system encouraging long-term student projects or performance-based assignments is striking."
Despite these challenges, participants identified practical learning opportunities through effective assessment tools that were inconsistently used across departments. Some teachers employed presentations, case studies, and project-based evaluations, though without formal institutional support. Faculty expressed interest in transition toward hybrid models combining traditional and skill-based approaches, recognising the potential of competency-based assessment to develop student skills for self-employment and professional careers.

The analysis then shifts to the second theme, evaluating pedagogical practices that support competency-based learning.
Analysis showed limited use of alternative assessment methods. Project-based and task-driven assessments were rarely part of grading. Real-world simulations and problem-solving exercises were also limited.

Skill development initiatives existed primarily through individual faculty initiative rather than a systematic institutional approach. Activities such as case studies, debates, and presentations were applied in a few courses, often informally and without systematic evaluation.

Re-structuring evaluation designs was a critical need. Faculty observed that syllabi rarely defined measurable skill-based objectives. Course content often lacked links to industry or real-world applications. Learning outcomes stayed abstract and disconnected from workplace needs.

Monitoring and feedback systems were identified as weak or non-existent. While students responded positively to interactive and applied assignments, mechanisms to support student growth and reflection remained absent. Departments lacked structured systems to monitor the effectiveness of assessment methods.

Theme 3: Strategic Model Embedding Skill-Based Assessment

Faculty recommendations for strategic implementation clustered around four key areas:

Professional Development: Structured training, real-world exposure, and regular follow-up were key to faculty using skill-based assessment.

Integration of Technology: Enhanced technology, including digital platforms and labs, was needed to support skill-based learning.

Policy Commitments: University-level support must provide departments with autonomy and tools to develop and implement innovative assessment approaches. Practical feedback systems should be established to guide continuous improvement.

Curriculum Reform: The scheme of studies should be redesigned to align with skill-based assessment systems to effectively achieve learning outcomes and improve teaching practices.

Discussion

Anxiety and CGPA

The moderate correlation between time-based assessment and learning proficiency (r=0.418) suggests that traditional examinations contribute to academic achievement as measured by grades, but their impact on deep learning remains limited. This finding aligns with Boud and Falchikov's (2006) theoretical argument that traditional evaluation systems fail to adequately develop learners' practical skills. The anxiety associated with time-bound examinations may actually impede optimal performance, as students focus on memorisation and reproduction rather than meaningful engagement with course content.

In the Pakistani context, where grade point averages heavily influence employment prospects and further education opportunities, the pressure to perform well on time-based assessments can be significant. Students may achieve a satisfactory CGPA through strategic memorisation, yet fail to develop the competencies necessary for professional success. This disconnect between grades and competence represents a fundamental flaw in assessment systems that prioritise time-bound performance over skill mastery.

Life Satisfaction and Academic Success

A strong correlation exists between skill-based assessment and learning proficiency (r = 0.633). This shows competency-based approaches improve academic outcomes and student satisfaction. Authentic tasks with real-world ties make learning meaningful and increase academic satisfaction (Wesselink et al., 2007).

Qualitative findings support this interpretation, with faculty reporting that students demonstrate increased motivation when exposed to non-traditional assessment formats. The opportunity to develop skills directly applicable to professional contexts appears to enhance students' sense of purpose and investment in their education. This connection between skill development and

life satisfaction is particularly significant in Balochistan, where limited employment opportunities make graduate employability a pressing concern.

Social Support and Academic Achievement

Faculty interviews highlighted the critical role of social support in successful assessment transitions. The absence of structured feedback mechanisms and monitoring systems limits students' ability to understand performance expectations and develop required competencies. This finding aligns with research emphasising the importance of transparent assessment criteria and timely feedback in supporting student learning (Fastré et al., 2010).

A lack of faculty training shows weak support for teachers and students. Without training or support, teachers cannot help students meet competency requirements. This continues reliance on traditional assessment despite its limits.

Practical Implications

The findings carry significant implications for higher education policy and practice in Pakistan. First, the demonstrated superiority of skill-based assessment for learning outcomes suggests that universities should prioritise competency-based approaches in assessment reform efforts. However, the qualitative findings regarding institutional barriers indicate that successful implementation requires a systematic rather than a piecemeal approach.

Second, the strong relationship between assessment design and student learning experiences ($r=0.727$) emphasises the importance of careful attention to assessment structure, clarity, and alignment with learning objectives. Institutions must invest in faculty development programs that build capacity for designing effective skill-based assessments.

Third, the hybrid approaches favoured by faculty members suggest that transition strategies should balance innovation with institutional readiness. Pilot projects, phased implementation, and gradual integration of skill-based elements into existing assessment frameworks may prove more sustainable than wholesale replacement of traditional systems.

Conclusion

This study investigated the transition from time-based to skill-based assessment in higher education, using Lasbela University of Agriculture, Water and Marine Sciences in Balochistan as a case study. The findings demonstrate that while time-based assessment maintains a moderate positive relationship with learning proficiency, skill-based assessment shows significantly stronger associations with learning outcomes. Assessment design and format emerge as powerful predictors of student learning experiences, accounting for nearly 60% of variance.

Qualitative findings reveal substantial institutional barriers to assessment reform, including inadequate infrastructure, limited faculty training, and the absence of supportive policy frameworks. Despite these challenges, faculty members express a strong interest in transitioning toward skill-based approaches and propose hybrid models that balance innovation with institutional realities.

The study contributes theoretically to understanding competence-based education frameworks in developing country contexts and practically by proposing a strategic model for implementing skill-based assessments tailored to local educational and socioeconomic factors. For Pakistani higher education institutions seeking to align with global standards while addressing local constraints, the findings suggest that systematic, phased approaches to assessment reform, supported by faculty development, technological investment, and policy commitment, offer the most promising path forward.

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