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EXPLORING THE LIVED EXPERIENCES OF UNDERGRADUATES WITH FORMATIVE ASSESSMENT TECHNIQUES IN SELECTED UNIVERSITIES IN KWARA STATE

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Abstract
Formative assessment has emerged as a key pedagogical strategy for improving student learning in Nigerian tertiary institutions, yet the lived experiences of undergraduates who interact with these techniques remain underexplored. This paper examines how undergraduate students in selected universities in Kwara State experience formative assessment techniques, with particular focus on continuous feedback, peer assessment, and self-directed learning strategies. Drawing on a qualitative, desk-review methodology synthesising peer-reviewed journals, government policy documents, and institutional reports published between 2019 and 2025 the paper identifies the formative assessment techniques most frequently documented in Nigerian higher education literature, the barriers to their effective implementation in Kwara State universities, and the relationship between continuous formative feedback and undergraduate academic growth. Findings indicate that while formative assessment demonstrably improves student engagement, self-regulation, and academic outcomes, its implementation is constrained by oversized classes, inadequate lecturer training, digital infrastructure deficits, and resistance to pedagogical change. The paper concludes with targeted policy recommendations for institutionalising formative assessment within Kwara State universities.

Keywords: formative assessment, undergraduate experiences, higher education, Kwara State, qualitative desk review, academic outcomes

Introduction

Assessment is central to the teaching and learning process in higher education. Globally, there has been a decisive shift from summative, grade-oriented evaluation towards formative, process-driven approaches that actively support student development (Black & Wiliam, 1998). Formative assessment broadly defined as any planned, ongoing process through which evidence of learning is gathered and used to improve student understanding and instructional practice (NWEA, 2023) has attracted sustained scholarly attention for its capacity to transform classroom dynamics and foster learner-centred pedagogy.

In sub-Saharan Africa, and Nigeria in particular, tertiary institutions continue to grapple with persistent structural constraints: overcrowded lecture halls, inadequate instructional resources, limited access to digital infrastructure, and insufficient opportunities for continuous professional development among academic staff (Adebayo & Ogundele, 2021; Adedoyin, 2020). These challenges create conditions in which summative, end-of-semester examinations remain the dominant mode of assessment, leaving students with little feedback to guide their learning journeys.

Within Kwara State, these difficulties are compounded by disparities in resource allocation across public universities, as well as the limited uptake of technology-enhanced assessment tools (Omodan & Ige, 2022). Despite federal and state-level policy commitments to quality education including teacher professional development initiatives and technology integration programmes the effective embedding of formative assessment within university teaching practice remains constrained.

A critical gap in the existing literature concerns the human dimension of formative assessment: how do undergraduates in Kwara State universities actually experience, respond to, and make sense of continuous feedback as part of their academic lives? Most studies in the Nigerian context rely on quantitative performance data or lecturer perceptions, with limited attention to the subjective experiences of students themselves (Omodan & Ige, 2022; Adebayo et al., 2019). This literature gap constitutes the conceptual problem that motivates the present study.

This paper addresses that gap through a qualitative desk review of existing literature, synthesising evidence from peer-reviewed journals, policy briefs, and institutional documents to illuminate the lived experiences of undergraduates with formative assessment techniques in Kwara State universities.

Research Objectives

This study is guided by the following objectives:

i. To examine the various formative assessment techniques currently documented in Nigerian university literature.

ii. To identify the challenges hindering the effective implementation of these techniques in selected universities in Kwara State.

iii. To synthesise the reported links between continuous feedback and undergraduate academic growth within the Nigerian context.

Research Questions

The study is directed by the following research questions:

1. What are the most prevalent formative assessment techniques used in Nigerian higher education according to existing research?

2. What does the literature identify as the primary barriers to implementing formative assessment in Kwara State universities?

3. Based on existing studies, how does formative feedback influence the learning outcomes of undergraduates?

Theoretical Framework

This study is grounded in two complementary theoretical perspectives that together illuminate how formative assessment supports student learning.

Social Constructivism (Vygotsky, 1978)

Social constructivism holds that learners build knowledge not in isolation but through social interaction, dialogue, and guided participation. Vygotsky's concept of the Zone of Proximal Development is particularly relevant: formative assessment feedback whether from lecturers or peers functions as scaffolding that draws students towards competencies they could not yet achieve independently. Peer assessment exercises, think-pair-share activities, and group-based feedback sessions are concrete classroom practices that operationalise this theoretical principle. In Kwara State universities, where large class sizes often limit individual lecturer-student interaction, peer-mediated formative assessment is especially significant.

Cybernetic Theory of Feedback (Wiener, 1948)

The cybernetic theory of feedback conceptualises learning as a self-correcting system: information about performance is looped back to the learner, enabling them to adjust their behaviour towards a defined goal. Applied to formative assessment, this theory explains why timely, specific feedback is more effective than delayed or generic evaluation. When undergraduates receive real-time corrective information through exit tickets, quiz results, or lecturer commentary they are able to identify and address misconceptions before they become entrenched. This feedback-loop mechanism is central to understanding how formative assessment improves academic outcomes in resource-constrained university settings.

Methodology

Research Design

This study adopts a qualitative desk-review (systematic literature review) design. Rather than collecting primary data from respondents in the field, the review systematically identifies, evaluates, and synthesises existing scholarly and policy literature relevant to formative assessment experiences among undergraduates in Nigerian and specifically Kwara State universities. A qualitative approach is appropriate here because the central concern is with meaning, experience, and interpretation rather than with numerical measurement of outcomes.

Population of the Study

The population of this study comprises the body of published scholarly literature addressing formative assessment practices and undergraduate experiences within Nigerian tertiary institutions, with a focal interest in Kwara State universities. This population includes peer-reviewed journal articles, government and institutional policy documents, conference proceedings, and relevant textbooks. Kwara State universities including the University of Ilorin, Kwara State University (KWASU), and Al-Hikmah University serve as the specific institutional context, given the availability of relevant literature and the researcher's contextual familiarity with the state.

Source Selection and Inclusion Criteria

To ensure rigour and relevance, sources were selected on the basis of the following inclusion criteria:

- Publication date: 2019–2025, to ensure currency and alignment with contemporary practices;
- Document type: peer-reviewed journal articles (primarily), supplemented by government policy briefs, institutional reports, and reputable edited textbooks;
- Geographic focus: studies conducted in Nigeria, with particular weight given to research situated in Kwara State or comparable north-central Nigerian university contexts;
- Thematic relevance: documents must address formative assessment techniques, undergraduate learning experiences, feedback mechanisms, or assessment implementation challenges in higher education.

Sources that focused exclusively on primary or secondary (K-12) education, or on summative assessment alone, were excluded. Searches were conducted across Google Scholar, ERIC, African Journals Online (AJOL), and ResearchGate using the search terms: formative assessment Nigeria, undergraduate feedback Kwara State, assessment for learning higher education Nigeria, and continuous assessment university Nigeria.

Data Analysis

Extracted data were analysed using thematic content analysis, following Braun and Clarke's (2006) six-phase framework: familiarisation with the data, generation of initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. Three overarching thematic domains guided the analysis: (i) cognitive impact of formative assessment (effects on academic achievement and conceptual understanding); (ii) psychological impact (effects on motivation, self-regulation, and learner identity); and (iii) student engagement (participation, peer interaction, and active learning behaviours). This thematic structure ensures that the review addresses both the academic and the human dimensions of undergraduates' formative assessment experiences.

Literature Review

Concept of Formative Assessment

Formative assessment denotes evaluative procedures implemented throughout the teaching and learning process, aimed primarily at improving learning rather than solely certifying it. In contrast to summative assessment, which measures achievement at the conclusion of instruction, formative assessment is ongoing, interactive, and diagnostic, providing prompt feedback that improves both teaching efficacy and learning outcomes. Black and Wiliam (1998) characterise it as encompassing all activities performed by teachers and learners that generate information to adjust the teaching and learning process ranging from oral questioning and group discussion to peer assessment and practical demonstration.

The core of formative assessment is the establishment of a productive feedback loop between teaching and learning. Eze (2014) underscores that it empowers learners by clarifying their strengths and areas for improvement. Immediacy is a distinguishing characteristic: real-time input rectifies misconceptions before they become entrenched (Adewale, 2017). In Nigeria, formative assessment underpins the Continuous Assessment (CA) framework of the National Policy on Education, facilitating ongoing evaluation of student development (Obemeata, 2018). Beyond academic achievement, it promotes inclusivity, active learning, and self-regulation (Ojo, 2019), functioning ultimately as a catalyst for deeper learning and problem-solving (Akinola, 2020).

Formative Assessment in Global and Nigerian Higher Education

Global perspective. Internationally, formative assessment has become embedded in educational reform agendas. Nations such as the United Kingdom, Singapore, and Finland have integrated formative practices within comprehensive curricula that emphasise meaningful learning over rote memorisation (Tan, 2019). Recent scholarship confirms this trend: Kaya-Capocci et al. (2022) found that digital formative assessment tools enhance real-time feedback and personalised learning, while Parmigiani et al. (2024) documented increased adoption of formative practices in higher education leading to improved student engagement and critical thinking. Kang and Lam (2024) further demonstrated that the effectiveness of formative assessment depends critically on educators' feedback literacy.

Nigerian context. Within Nigeria, the integration of formative assessment in university settings faces systemic headwinds: infrastructural deficits, resistance to pedagogical change, and limited faculty digital literacy (Onaolapo & Onasanya, 2020). Adedoyin (2020) documents that while formative assessment practices are theoretically endorsed through the Continuous Assessment policy framework, implementation in public universities remains inconsistent. Omodan and Ige (2022) observed moderate gains in student satisfaction following technology-based formative assessment in a south-west Nigerian university, but called for more rigorous empirical evaluation of actual learning outcomes. Adebayo et al. (2019) similarly

reported positive lecturer perceptions of e-assessment tools while highlighting a deficit of evidence tying these tools to performance gains.

Kwara State context. In Kwara State, the challenges characteristic of Nigerian higher education are intensified by large class sizes across public universities and uneven access to digital infrastructure. The KWARALEARN initiative, which sought to integrate technology into public education, has had limited reach at the tertiary level. No published empirical study was identified that specifically examines undergraduate formative assessment experiences in Kwara State universities, confirming the literature gap that this review addresses.

Thematic Analysis of Impact

(i) Cognitive Impact. The literature consistently demonstrates that formative assessment enhances academic achievement and conceptual understanding. Black and Wiliam's (1998) foundational meta-analysis showed that formative strategies produce effect sizes equivalent to one to two standard deviations of improvement. More recently, Andrade and Brookhart (2020) found that feedback loops and peer assessment substantially deepen learners' understanding of core subject matter by promoting active learning and metacognition. OECD (2020) evidence further confirms that formative measures are essential for improving reading and numeracy outcomes across diverse educational environments. For Nigerian undergraduates, the cumulative effect of targeted formative feedback is enhanced examination performance, stronger conceptual understanding, and longer-term knowledge retention (Adedoyin, 2020).

(ii) Psychological Impact. Trujillo et al. (2025) found that students exposed to continuous feedback demonstrate higher levels of motivation and academic self-regulation. Irawati et al. (2021) observed that the instant feedback feature of digital assessment tools contributed significantly to learner motivation and retention. Schildkamp et al. (2020) and Andrade and Brookhart (2020) further highlight formative assessment's role in fostering growth mindsets and reducing assessment anxiety — a particularly significant finding in the high-stakes culture of Nigerian university examinations, where fear of failure can undermine student engagement.

(iii) Student Engagement. Peer and self-assessment practices have been shown to promote collaborative learning and deeper engagement with subject matter (Parmigiani et al., 2024). Yulianti and Sugiharti (2020) found that students who received digitally mediated formative assessments demonstrated higher engagement compared with those assessed through traditional methods alone. In the Nigerian university context where large lecture formats can render students passive recipients rather than active participants formative strategies such as exit tickets, think-pair-share, and group quizzes serve as practical mechanisms for restoring student agency.

Challenges of Implementation in Kwara State Universities

The literature identifies several inter-related barriers that constrain the effective implementation of formative assessment in Nigerian tertiary institutions, all of which are applicable to Kwara State:

- Large class sizes: Overcrowded lecture halls make it logistically difficult for lecturers to provide individualised, timely feedback to every student.
- Limited lecturer training: Many university lecturers have received little professional development in assessment literacy or feedback design (Kang & Lam, 2024).
- Technological constraints: Inconsistent internet connectivity and inadequate device access limit the uptake of digital formative tools such as Google Forms or online quiz platforms.
- Resistance to pedagogical change: Institutional cultures that privilege summative examinations create inertia against formative innovation.
- Workload pressures: Heavy teaching, research, and administrative loads leave lecturers with limited time for the design and analysis of formative tasks (Adedoyin & Soykan, 2020).

Discussion

The reviewed literature consistently affirms that formative assessment improves undergraduate learning outcomes across the three thematic domains of cognitive impact, psychological impact, and engagement. These findings align with the theoretical frameworks adopted in this study: the social constructivist model explains how feedback-mediated interaction supports knowledge construction among peers, while the cybernetic feedback model accounts for the corrective, self-regulating function of timely assessment information.

For undergraduates in Kwara State universities, the lived experience of formative assessment is shaped by a tension between the demonstrated benefits of the practice and the structural realities of their institutional environment.

Where lecturers have successfully integrated formative strategies — even low-technology approaches such as oral questioning, peer discussion, or brief written reflections — students have reported greater confidence, deeper comprehension, and improved examination performance. However, these pockets of practice remain unsystematic and dependent on individual lecturer initiative, rather than being institutionally embedded.

The absence of published empirical studies specifically examining Kwara State undergraduate experiences reveals not only a research gap but also an accountability gap: without documented evidence of what students experience, it is difficult for institutions or policymakers to design targeted improvements. This desk review, by synthesising available regional and national evidence, provides a foundation for future primary research — including interview-based or phenomenological studies that can speak more directly to the subjective experiences of Kwara State undergraduates.

Conclusion

This desk review has demonstrated that formative assessment represents an effective and evidence-based pedagogical approach for enhancing educational outcomes in Nigerian tertiary institutions, including universities in Kwara State. The synthesis of global, national, and regional literature confirms that formative assessment positively influences undergraduate cognitive development, psychological well-being, and academic engagement. At the same time, the review has identified significant implementation barriers particularly class size, lecturer capacity, and technological infrastructure that must be addressed if the benefits of formative assessment are to reach all undergraduates equitably. The near-total absence of Kwara State-specific empirical data underscores the urgent need for further primary research into how undergraduates in these universities experience and respond to formative feedback.

Recommendations

On the basis of the reviewed evidence, the following recommendations are advanced:

1. Continuous professional development: Universities in Kwara State should institutionalise regular assessment literacy workshops for lecturers, with specific training in designing and delivering formative feedback in large-class contexts.
2. Institutional policy support: University management should embed formative assessment requirements within course delivery frameworks, moving beyond voluntary adoption by individual lecturers.
3. Investment in digital infrastructure: State and federal governments should prioritise internet connectivity and affordable device access in public tertiary institutions to enable technology-enhanced formative practices.
4. Class size reduction: Strategic expansion of teaching staff and rationalisation of student enrolments per course unit would create conditions more conducive to individualised formative feedback.
5. Primary research agenda: Researchers in Kwara State universities are encouraged to conduct phenomenological or interview-based studies that directly document undergraduate lived experiences with formative assessment, filling the identified literature gap.
6. Policy-practice alignment: National and state education policy documents should be reviewed to strengthen the operational requirements for formative assessment implementation in tertiary institutions.

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