

Beyond the Lecture Hall: Using Curriculum Reform to Foster Productive Engagement Among University Students in Uganda

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Abstract: This cross-sectional quantitative study examined how curriculum reform initiatives could foster productive engagement among university students in Uganda, addressing the persistent challenge of passive, lecture-based instructional approaches that limited student participation and failed to develop critical competencies required for the 21st-century workplace. Data were analyzed using univariate analysis (frequencies, means, standard deviations), bivariate analysis (Pearson correlations, independent samples t-tests), and Structural Equation Modeling (SEM) to test hypothesized relationships between curriculum reform dimensions and student engagement. Univariate results revealed that overall student engagement remained moderate to low ($M=2.87$, $SD=0.92$), with absorption showing the lowest dimension score ($M=2.76$, $SD=0.99$), while active learning methods demonstrated the weakest curriculum characteristic rating ($M=2.63$, $SD=1.04$), indicating limited implementation of student-centered pedagogies across Ugandan universities. Bivariate analyses demonstrated statistically significant positive correlations between all curriculum variables and student engagement (r ranging from .571 to .623, $p<.01$), with private universities showing significantly higher engagement and more progressive curriculum practices than public institutions, though with modest effect sizes (Cohen's d ranging from 0.21 to 0.30). The SEM analysis revealed excellent model fit ($\chi^2/df=2.23$, $CFI=0.942$, $TLI=0.931$, $RMSEA=0.054$, $SRMR=0.048$) and demonstrated that curriculum reform variables collectively explained 59.2% of variance in student engagement, with active learning methods exerting the strongest direct effect ($\beta=.312$, $p<.001$), followed by curriculum relevance ($\beta=.246$, $p<.001$), learning environment ($\beta=.203$, $p<.001$), and assessment diversity ($\beta=.187$, $p<.001$). Mediation analyses revealed that learning environment partially mediated the relationship between active learning methods and engagement, while active pedagogies partially mediated the relationship between curriculum relevance and engagement, indicating synergistic interactions among curriculum dimensions. The study concluded that strategic, holistic curriculum reform addressing pedagogical transformation, content contextualization, assessment innovation, and learning environment enhancement represented powerful mechanisms for cultivating productive student engagement in Ugandan universities.

Keywords: curriculum reform, student engagement, active learning, higher education, pedagogical innovation, assessment diversity

Introduction of the Study

The landscape of higher education in Uganda is undergoing significant transformation as universities grapple with the challenge of preparing students for an increasingly complex and dynamic global economy. Traditional lecture-based pedagogies, which have dominated Ugandan universities since their establishment, are proving inadequate in fostering the critical thinking, problem-solving, and collaborative skills that contemporary workplaces demand (Awacorach et al., 2021; Fahimah et al., 2021; Kurusumu & Rebecca, 2025). This study examines how curriculum reform initiatives can enhance productive engagement among university students in Uganda, moving beyond passive learning approaches toward active, participatory educational experiences.

Student engagement has emerged as a critical determinant of academic success, retention rates, and post-graduation outcomes in higher education institutions worldwide. In the Ugandan context, where universities face mounting pressure to improve graduate employability and contribute meaningfully to national development goals, the need for curriculum transformation has become particularly urgent (Enock et al., 2023; ŞENYİĞİT, 2018). This research explores innovative curriculum reform strategies that promote active learning, community engagement, experiential learning opportunities, and interdisciplinary approaches, with the aim of cultivating more engaged, competent, and socially responsible graduates (Bridget & Geophrey, 2023; Kukundakwe, 2024; Rista & Mukli, 2022).

By investigating current curriculum practices, identifying barriers to student engagement, and proposing evidence-based reform strategies, this study seeks to contribute to the ongoing discourse on educational quality improvement in Ugandan higher education institutions and provide practical recommendations for policymakers, university administrators, and educators committed to transforming teaching and learning experiences.

Background of the Study

Uganda's higher education sector has experienced remarkable expansion over the past three decades, with the number of universities growing from one national university in 1988 to over 50 public and private institutions today. However, this quantitative growth has not been matched by corresponding improvements in educational quality and student engagement (Denis & Sophie, 2023; Gracious, 2024; Strzelecki & ElArabawy, 2024). Many Ugandan universities continue to rely heavily on teacher-centered instructional methods characterized by passive lecture delivery, rote memorization, and examination-focused assessment systems that limit opportunities for meaningful student participation and critical inquiry (Julius & Geoffrey, 2025; Vargos et al., 2021; Vincent & Peter, 2024).

The challenge of student disengagement manifests in various forms across Ugandan universities, including high absenteeism rates, limited classroom participation, poor academic performance, and a disconnect between theoretical knowledge and practical

application (Darussyamsu et al., 2021; Monday & Geophrey, 2023; Shafie et al., 2022). Research indicates that Ugandan university students often view education as a credentialing process rather than a transformative learning experience, leading to surface learning approaches and limited retention of knowledge beyond examinations. This disengagement crisis has serious implications for graduate competencies, employability, and Uganda's broader development aspirations (Jameel et al., 2022; Kibuuka, 2022; Sarah & Gracious Kazaara, 2024).

Globally, curriculum reform has been recognized as a powerful lever for enhancing student engagement and learning outcomes. Progressive educational institutions have embraced pedagogical innovations such as problem-based learning, collaborative projects, community-based research, technology-enhanced learning, and competency-based curricula that position students as active constructors of knowledge rather than passive recipients (Gideon, 2023; Gracious Kaazara & Audrey, 2025; Isaac Kazaara & Gracious Kazaara, 2024; Kirya et al., 2021). Such approaches have demonstrated success in improving student motivation, deepening understanding, developing transferable skills, and fostering lifelong learning dispositions. In the Ugandan context, several policy frameworks including the National Development Plan, Vision 2040, and the Education Sector Strategic Plan have emphasized the need for higher education transformation to align with labor market demands and national development priorities. The National Council for Higher Education has also advocated for curriculum relevance and quality assurance improvements. However, implementation of meaningful curriculum reforms remains inconsistent across institutions, hampered by resource constraints, institutional inertia, limited faculty development, and resistance to pedagogical change (Bagonza & Kaahwa, 2023; Julius & Nancy, 2025; Ryan et al., 2022). This study is situated within this complex educational landscape, seeking to identify practical pathways for curriculum transformation that can enhance productive student engagement in Ugandan universities.

Problem Statement

Despite increasing recognition of the importance of active learning and student engagement in higher education, Ugandan universities continue to struggle with predominantly passive, lecture-based instructional approaches that limit student participation and fail to develop critical competencies required for the 21st-century workplace (Belogianni et al., 2022; Jaquette & Hillman, 2015; Kazaara & Nancy, 2025). Current curriculum structures and pedagogical practices in many Ugandan universities emphasize content transmission over skill development, theoretical knowledge over practical application, and individual competition over collaborative learning, resulting in disengaged students who demonstrate limited critical thinking abilities, poor problem-solving skills, and inadequate preparation for professional practice (Kihumuro et al., 2022; Rebecca & Jill Margaret, 2024; Sánchez-Hernando et al., 2021; Suzan & Alex, 2024). The consequences of this engagement deficit are far-reaching. Employers consistently report that Ugandan university graduates lack essential competencies including analytical thinking, communication skills, teamwork abilities, and practical problem-solving capacities. High youth unemployment rates, estimated at over 60% among university graduates, partly reflect this mismatch between educational outcomes and labor market requirements. Furthermore, low student engagement contributes to academic underperformance, high attrition rates, and limited contribution of universities to community development and social innovation (Julius & Mategeko, 2025).

While curriculum reform is widely acknowledged as necessary, there remains insufficient empirical understanding of the specific curriculum design elements, pedagogical strategies, and institutional conditions that most effectively foster productive student engagement in the Ugandan university context. Questions persist about how to adapt international best practices to local cultural contexts, resource constraints, and institutional capacities. Without evidence-based guidance on effective curriculum reform approaches tailored to the Ugandan higher education environment, universities risk implementing superficial changes that fail to address fundamental engagement challenges or, conversely, abandoning reform efforts altogether due to implementation difficulties (Julius & Audrey, 2025). This study addresses this critical knowledge gap by systematically investigating how curriculum reform can be strategically designed and implemented to enhance productive engagement among university students in Uganda, thereby contributing to improved learning outcomes, graduate competencies, and the broader transformation of Ugandan higher education.

Main Objective of the Study

To examine how curriculum reform initiatives can be designed and implemented to foster productive engagement among university students in Uganda.

Specific Objectives

1. To assess the current state of student engagement and identify factors within existing curriculum structures that inhibit or promote productive engagement in Ugandan universities.
2. To explore curriculum reform strategies and pedagogical innovations that have demonstrated effectiveness in enhancing student engagement in Ugandan and comparable higher education contexts.
3. To develop evidence-based recommendations for curriculum reform policies and practices that can systematically foster productive student engagement in Ugandan universities.

Research Questions

1. What is the current level of student engagement in Ugandan universities, and which aspects of existing curriculum structures and pedagogical practices significantly influence student engagement patterns?
2. What curriculum reform strategies and innovative pedagogical approaches have proven effective in enhancing productive student engagement in Ugandan universities and similar higher education environments?

3. What practical, context-appropriate recommendations can guide curriculum reform efforts to systematically improve productive engagement among university students in Uganda?

Methodology

This study employed a cross-sectional quantitative research design to examine how curriculum reform initiatives could foster productive engagement among university students in Uganda. The research was conducted across five purposively selected universities in Uganda, comprising three public and two private institutions, chosen based on their geographical diversity, student population size, and varying levels of curriculum reform implementation. The target population consisted of undergraduate students in their second, third, and fourth years of study, as well as academic staff members involved in curriculum design and delivery. A multi-stage sampling technique was utilized, whereby universities were first purposively selected, followed by stratified random sampling to select faculties representing humanities, sciences, and professional disciplines, and finally simple random sampling to select 420 students and 80 academic staff members, yielding a total sample size of 500 respondents based on Krejcie and Morgan's (1970) sample size determination table. Data were collected using structured, self-administered questionnaires that measured student engagement levels using the Utrecht Work Engagement Scale for Students (UWES-S), curriculum characteristics (teaching methods, assessment practices, content relevance, learning environment), and perceptions of curriculum reform effectiveness. The questionnaire items were measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Reliability and validity of the instruments were established through Cronbach's alpha coefficients (all exceeding 0.70) and expert content validation by three professors in higher education. Data were analyzed using SPSS version 26 and AMOS version 24 software, employing univariate analysis (frequencies, percentages, means, and standard deviations) to describe respondent characteristics and variable distributions, bivariate analysis (Pearson correlation coefficients and independent samples t-tests) to examine relationships between curriculum variables and student engagement, and Structural Equation Modeling (SEM) to test the hypothesized relationships between curriculum reform dimensions and student engagement while controlling for confounding variables. The SEM approach allowed for simultaneous examination of multiple relationships and measurement error correction, with model fit assessed using chi-square statistics, Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR). Ethical approval was obtained from the university ethics committee, and informed consent was secured from all participants, with assurances of confidentiality and voluntary participation.

Results

Table 1: Descriptive Statistics of Student Engagement Levels and Curriculum Characteristics (N=420)

Variable	Mean	SD	Min	Max	Skewness	Kurtosis
Student Engagement (Overall)	2.87	0.92	1.00	5.00	0.14	-0.68
Vigor (Energy and resilience)	2.94	0.98	1.00	5.00	0.09	-0.71
Dedication (Involvement and enthusiasm)	2.91	0.95	1.00	5.00	0.11	-0.65
Absorption (Concentration and immersion)	2.76	0.99	1.00	5.00	0.21	-0.70
Active Learning Methods	2.63	1.04	1.00	5.00	0.28	-0.79
Group discussions and collaborative work	2.81	1.12	1.00	5.00	0.19	-0.88
Problem-based learning activities	2.52	1.08	1.00	5.00	0.31	-0.75
Practical/hands-on experiences	2.56	1.15	1.00	5.00	0.34	-0.82
Assessment Diversity	2.71	0.97	1.00	5.00	0.16	-0.73
Continuous assessment practices	3.12	1.06	1.00	5.00	-0.08	-0.69
Varied assessment methods	2.48	1.01	1.00	5.00	0.36	-0.65
Feedback quality and timeliness	2.54	1.08	1.00	5.00	0.29	-0.78
Curriculum Relevance	2.89	0.99	1.00	5.00	0.12	-0.71
Real-world application of content	2.76	1.05	1.00	5.00	0.22	-0.76
Alignment with career goals	3.01	1.08	1.00	5.00	0.06	-0.79
Integration of contemporary issues	2.91	1.02	1.00	5.00	0.09	-0.68
Learning Environment	2.78	0.94	1.00	5.00	0.18	-0.66
Faculty-student interaction quality	2.93	1.03	1.00	5.00	0.11	-0.74
Technology integration in learning	2.59	1.11	1.00	5.00	0.27	-0.81
Physical learning facilities adequacy	2.82	1.09	1.00	5.00	0.15	-0.77

The univariate analysis revealed that overall student engagement in Ugandan universities was moderate to low, with a mean score of 2.87 (SD=0.92) on a five-point scale, indicating that students reported engagement levels slightly below the midpoint. Among the three dimensions of engagement, vigor demonstrated the highest mean (M=2.94, SD=0.98), followed by dedication (M=2.91, SD=0.95), while absorption showed the lowest mean (M=2.76, SD=0.99), suggesting that students experienced moderate energy and resilience in their studies but struggled with deep concentration and immersion in learning activities. The curriculum characteristics

variables displayed similar patterns, with active learning methods showing the lowest mean ($M=2.63$, $SD=1.04$), particularly problem-based learning activities ($M=2.52$, $SD=1.08$) and practical experiences ($M=2.56$, $SD=1.15$), indicating limited implementation of student-centered pedagogies. Assessment diversity ($M=2.71$, $SD=0.97$) and learning environment ($M=2.78$, $SD=0.94$) also scored below the scale midpoint, while curriculum relevance ($M=2.89$, $SD=0.99$) and continuous assessment practices ($M=3.12$, $SD=1.06$) demonstrated slightly higher ratings. The standard deviations across all variables ranged from 0.92 to 1.15, indicating considerable variability in student perceptions, while skewness values between 0.09 and 0.36 and kurtosis values between -0.65 and -0.88 confirmed approximately normal distributions suitable for parametric statistical analyses.

These findings highlighted significant deficiencies in both student engagement levels and curriculum reform implementation across Ugandan universities, confirming the problem statement's assertion that passive, lecture-based approaches continued to dominate instructional practices. The particularly low scores on active learning methods suggested that despite policy rhetoric emphasizing pedagogical transformation, traditional teacher-centered approaches remained entrenched, with students reporting infrequent exposure to collaborative work, problem-based learning, and hands-on practical experiences that research literature consistently identified as critical engagement drivers. The moderate curriculum relevance scores indicated that while students perceived some connection between their studies and real-world applications, this linkage was insufficiently strong to generate high engagement levels, possibly reflecting curricula that remained theoretical and disconnected from contemporary workplace demands and societal challenges. The absorption dimension's lowest rating was particularly concerning, as it suggested students struggled to achieve the deep, focused immersion in learning that characterized truly productive engagement and meaningful knowledge construction. The relatively higher rating for continuous assessment practices compared to varied assessment methods and feedback quality revealed a concerning pattern whereby universities had increased the frequency of assessments without necessarily diversifying assessment approaches or improving the formative feedback that supported learning. The substantial variability in student perceptions, evidenced by standard deviations exceeding 0.90 across most variables, pointed to significant heterogeneity in curriculum implementation both within and across institutions, suggesting that pockets of innovation existed but had not been systematically scaled or institutionalized, thereby creating inequitable learning experiences for different student populations.

Table 2: Bivariate Correlations Between Curriculum Variables and Student Engagement (N=420)

Variable	1	2	3	4	5	6	7	8
1. Student Engagement (Overall)	1							
2. Vigor	.891**	1						
3. Dedication	.907**	.738**	1					
4. Absorption	.872**	.652**	.701**	1				
5. Active Learning Methods	.623**	.547**	.598**	.561**	1			
6. Assessment Diversity	.571**	.498**	.542**	.519**	.612**	1		
7. Curriculum Relevance	.604**	.531**	.587**	.543**	.589**	.558**	1	
8. Learning Environment	.586**	.512**	.561**	.527**	.634**	.597**	.621**	1

Note: ** Correlation is significant at the 0.01 level (2-tailed)

Independent Samples t-test Results:

Group Comparison	Variable	Public Universities (n=252)	Private Universities (n=168)	t-value	p-value	Cohen's d
University Type	Student Engagement	M=2.79, SD=0.89	M=3.01, SD=0.95	-2.43	.015	0.24
University Type	Active Learning Methods	M=2.51, SD=1.01	M=2.82, SD=1.07	-3.01	.003	0.30
University Type	Assessment Diversity	M=2.63, SD=0.94	M=2.84, SD=1.01	-2.15	.032	0.21
University Type	Curriculum Relevance	M=2.82, SD=0.97	M=3.00, SD=1.01	-1.84	.067	0.18
University Type	Learning Environment	M=2.69, SD=0.91	M=2.93, SD=0.98	-2.58	.010	0.26

The Pearson correlation analysis revealed statistically significant positive relationships between all curriculum reform variables and student engagement at the 0.01 significance level, providing empirical support for the study's theoretical framework. The correlation coefficients between overall student engagement and curriculum variables ranged from moderate to strong: active learning methods ($r=.623$, $p<.01$), curriculum relevance ($r=.604$, $p<.01$), learning environment ($r=.586$, $p<.01$), and assessment diversity ($r=.571$, $p<.01$). Among the engagement dimensions, dedication showed the strongest correlations with all curriculum variables (ranging from $r=.542$ to $r=.598$), followed by absorption and vigor, suggesting that meaningful curriculum reform particularly enhanced students' sense of involvement and enthusiasm in their studies. The inter-correlations among curriculum variables ranged from $r=.558$ to $r=.634$, indicating that these curriculum dimensions were related but sufficiently distinct to warrant separate examination. The

independent samples t-tests comparing public and private universities revealed statistically significant differences in student engagement ($t=-2.43, p=.015, \text{Cohen's } d=0.24$), active learning methods ($t=-3.01, p=.003, \text{Cohen's } d=0.30$), assessment diversity ($t=-2.15, p=.032, \text{Cohen's } d=0.21$), and learning environment ($t=-2.58, p=.010, \text{Cohen's } d=0.26$), with private universities consistently demonstrating higher means across these variables. However, the effect sizes ranged from small to small-medium (Cohen's d between 0.21 and 0.30), indicating that while differences were statistically significant, their practical magnitude was modest.

The consistent positive correlations between all curriculum reform dimensions and student engagement provided compelling evidence that curriculum transformation initiatives represented viable pathways for enhancing productive engagement in Ugandan universities, directly addressing the study's main objective. The particularly strong relationship between active learning methods and student engagement ($r=.623$) aligned with extensive international research demonstrating that pedagogical approaches positioning students as active knowledge constructors rather than passive recipients significantly enhanced motivation, investment, and learning outcomes. The substantial correlation between curriculum relevance and engagement ($r=.604$) underscored students' need for meaningful connections between academic content and real-world applications, career aspirations, and societal challenges, suggesting that curriculum reform efforts should prioritize contextualization, application-oriented learning, and integration of contemporary issues relevant to Uganda's development context. The positive association between assessment diversity and engagement ($r=.571$), while slightly lower than other curriculum variables, indicated that moving beyond traditional examination-focused assessment toward varied, authentic assessment methods that provided meaningful feedback could enhance student investment in learning processes. The finding that dedication demonstrated the strongest correlations with curriculum variables was particularly insightful, suggesting that effective curriculum reform primarily enhanced students' emotional and psychological investment in their studies—their sense of significance, enthusiasm, inspiration, and pride in their learning—which represented a crucial foundation for sustained engagement and deep learning. The statistically significant differences between public and private universities, with private institutions demonstrating higher engagement and more progressive curriculum practices, raised important questions about resource availability, institutional autonomy, faculty development, and quality assurance mechanisms that might differentially enable curriculum innovation across Uganda's stratified higher education system. However, the modest effect sizes suggested that university type alone did not determine engagement outcomes, and that intentional curriculum reform efforts could enhance engagement in both public and private contexts, though potentially requiring different implementation strategies and support structures tailored to each institution type's unique constraints and opportunities.

Table 3: Structural Equation Modeling Results for Curriculum Reform Impact on Student Engagement (N=420)

Model Fit Indices:

Fit Index	Obtained Value	Recommended Threshold	Interpretation
χ^2 (df)	287.43 (129)	-	-
χ^2/df	2.23	< 3.00	Acceptable fit
CFI (Comparative Fit Index)	0.942	> 0.90	Good fit
TLI (Tucker-Lewis Index)	0.931	> 0.90	Good fit
RMSEA (90% CI)	0.054 (0.046-0.063)	< 0.08	Good fit
SRMR	0.048	< 0.08	Good fit

Standardized Path Coefficients:

Path	Standardized β	Standard Error	Critical Ratio	p-value	R ²
Active Learning Methods → Student Engagement	.312	.052	6.01	<.001***	-
Assessment Diversity → Student Engagement	.187	.048	3.89	<.001***	-
Curriculum Relevance → Student Engagement	.246	.051	4.82	<.001***	-
Learning Environment → Student Engagement	.203	.049	4.14	<.001***	-
Total Variance Explained in Student Engagement					.592

Indirect Effects and Mediation Analysis:

Relationship	Direct Effect	Indirect Effect	Total Effect	Mediation Type
Active Learning Methods → Learning Environment → Student Engagement	.312***	.089**	.401***	Partial mediation
Curriculum Relevance → Active Learning Methods → Student Engagement	.246***	.071**	.317***	Partial mediation

Note: *** $p < .001$, ** $p < .01$, * $p < .05$

The structural equation modeling analysis demonstrated excellent model fit across all indices, with the chi-square to degrees of freedom ratio of 2.23 falling well below the recommended threshold of 3.00, CFI and TLI values of 0.942 and 0.931 respectively exceeding the 0.90 criterion for good fit, RMSEA of 0.054 with a narrow 90% confidence interval (0.046-0.063) indicating close approximate fit, and SRMR of 0.048 well below the 0.08 threshold, collectively confirming that the hypothesized model adequately

represented the observed data structure. The standardized path coefficients revealed that all four curriculum reform dimensions exerted statistically significant positive effects on student engagement at the $p < .001$ level, with active learning methods demonstrating the strongest direct effect ($\beta = .312$, $CR = 6.01$, $p < .001$), followed by curriculum relevance ($\beta = .246$, $CR = 4.82$, $p < .001$), learning environment ($\beta = .203$, $CR = 4.14$, $p < .001$), and assessment diversity ($\beta = .187$, $CR = 3.89$, $p < .001$). The model explained 59.2% of the variance in student engagement ($R^2 = .592$), indicating substantial explanatory power and confirming that curriculum reform variables represented major determinants of engagement outcomes. The mediation analysis revealed significant indirect effects, with learning environment partially mediating the relationship between active learning methods and student engagement (indirect effect = .089, $p < .01$) and active learning methods partially mediating the relationship between curriculum relevance and student engagement (indirect effect = .071, $p < .01$), suggesting complex interrelationships among curriculum dimensions whereby certain reform elements created enabling conditions for others to more effectively enhance engagement.

The SEM results provided robust empirical evidence that curriculum reform initiatives represented powerful mechanisms for fostering productive engagement among Ugandan university students, with the model explaining approximately 59% of engagement variance—a substantial proportion that underscored curriculum transformation's central role in addressing the engagement crisis identified in the problem statement. The finding that active learning methods exerted the strongest direct effect on engagement ($\beta = .312$) had critical implications for reform priorities, suggesting that pedagogical transformation from teacher-centered lecture delivery to student-centered participatory approaches should constitute the cornerstone of engagement enhancement strategies. This aligned with constructivist learning theories emphasizing that students construct knowledge most effectively through active manipulation of ideas, collaborative problem-solving, hands-on experimentation, and authentic application rather than passive information reception, and suggested that Ugandan universities needed substantial investment in faculty development programs equipping educators with skills, confidence, and institutional support to implement problem-based learning, collaborative projects, experiential learning opportunities, and other active pedagogies. The significant effect of curriculum relevance ($\beta = .246$) validated students' need for meaningful connections between academic content and real-world contexts, implying that curriculum review processes should systematically incorporate labor market analyses, community needs assessments, stakeholder consultations, and contemporary issue integration to ensure programs addressed Uganda's development priorities while preparing graduates for evolving career landscapes. The positive effects of learning environment ($\beta = .203$) and assessment diversity ($\beta = .187$), while somewhat smaller than active learning and relevance, remained statistically and practically significant, indicating that comprehensive curriculum reform required attention to multiple interconnected dimensions including technology infrastructure, faculty-student interaction quality, physical facilities, formative assessment practices, varied assessment methods, and timely feedback mechanisms. The mediation findings were particularly insightful, revealing that curriculum reform elements operated synergistically rather than independently, whereby creating supportive learning environments amplified active learning methods' effectiveness, and implementing active pedagogies served as mechanisms through which curriculum relevance translated into enhanced engagement.

Conclusion

This study provided compelling empirical evidence that curriculum reform initiatives represented powerful and viable mechanisms for fostering productive engagement among university students in Uganda, thereby addressing a critical challenge facing the nation's higher education sector. The findings revealed that student engagement levels across Ugandan universities remained moderate to low, with students reporting particularly weak absorption in learning activities and limited exposure to active, student-centered pedagogical approaches, confirming the persistence of traditional lecture-based instructional methods despite policy advocacy for educational transformation. The bivariate correlation analyses demonstrated statistically significant positive relationships between all examined curriculum dimensions—active learning methods, assessment diversity, curriculum relevance, and learning environment—and student engagement, with correlation coefficients ranging from .571 to .623, indicating that meaningful curriculum reform across these domains could substantially enhance student investment, motivation, and participation in learning processes. Most notably, the structural equation modeling analysis, which demonstrated excellent model fit across all indices, revealed that curriculum reform variables collectively explained 59.2% of variance in student engagement, with active learning methods exerting the strongest direct effect ($\beta = .312$), followed by curriculum relevance ($\beta = .246$), learning environment ($\beta = .203$), and assessment diversity ($\beta = .187$), all statistically significant at $p < .001$. The identification of partial mediation effects whereby learning environment amplified the impact of active learning methods, and active pedagogies served as mechanisms through which curriculum relevance enhanced engagement, underscored the synergistic, interconnected nature of curriculum reform elements and highlighted the necessity for holistic, systemic transformation strategies rather than piecemeal interventions. The study's findings that private universities demonstrated significantly higher engagement and more progressive curriculum practices than public institutions, albeit with modest effect sizes, raised important questions about institutional capacity, resource allocation, and quality assurance mechanisms that warranted further investigation and policy attention. Ultimately, this research contributed valuable evidence-based insights to ongoing discourse on higher education quality improvement in Uganda, demonstrating that strategic curriculum reform addressing pedagogical approaches, content relevance, assessment practices, and learning environments represented not merely desirable enhancements but essential interventions for cultivating the engaged, competent, and innovative graduates required to advance Uganda's development aspirations in an increasingly complex global economy.

Recommendations

Institutionalize Comprehensive Faculty Development Programs: The study strongly recommends that Ugandan universities establish mandatory, ongoing professional development programs that equip faculty members with pedagogical competencies in active learning methodologies including problem-based learning, collaborative learning strategies, experiential education, and technology-enhanced instruction. These programs should move beyond one-off workshops to sustained, practice-based professional learning communities where educators collaboratively design student-centered curricula, share implementation experiences, receive peer coaching, and access institutional resources supporting pedagogical innovation. Universities should allocate at least 5% of their annual budgets to faculty development initiatives, establish teaching excellence centers providing continuous pedagogical support, implement robust mentorship programs pairing experienced active learning practitioners with faculty new to student-centered approaches, and integrate evidence of pedagogical innovation into promotion and tenure criteria to incentivize sustained commitment to teaching transformation. Given the significant effect of active learning methods on student engagement ($\beta=.312$), this recommendation addresses the most powerful lever for engagement enhancement identified in the study.

Implement Systematic Curriculum Relevance Audits with Stakeholder Engagement: Universities should establish formal mechanisms for periodic curriculum relevance audits (minimally every three years) that systematically assess alignment between academic programs and contemporary workplace requirements, societal challenges, and national development priorities. These audits should employ mixed-methods approaches including graduate tracer studies tracking employment outcomes and skill utilization, employer surveys identifying competency gaps, labor market analyses forecasting emerging skill demands, student feedback on perceived relevance, and community needs assessments identifying opportunities for university contributions to local development. Critically, curriculum review committees should include representation from industry partners, professional associations, community organizations, alumni, and current students alongside academic faculty to ensure diverse perspectives inform content selection, learning outcomes specification, and pedagogical approach determination. The significant relationship between curriculum relevance and engagement ($\beta=.246$) demonstrates that students invest more deeply in learning when they perceive clear connections between academic content and real-world applications, making this stakeholder-engaged curriculum renewal process essential for both engagement enhancement and graduate employability improvement.

Develop Comprehensive Assessment Reform Frameworks Emphasizing Diversity and Formative Feedback: The study recommends that universities adopt assessment reform policies requiring each academic program to utilize minimally four diverse assessment methods beyond traditional written examinations, including portfolios, project-based assessments, presentations, practical demonstrations, peer and self-assessments, and authentic workplace simulations. Assessment policies should mandate that formative assessment constitutes at least 40% of final grades, with detailed rubrics provided to students before assessment completion and comprehensive feedback returned within two weeks of submission to support learning improvement. Universities should invest in faculty training on designing authentic assessments aligned with learning outcomes, providing constructive feedback, and utilizing assessment data for continuous curriculum improvement. Additionally, learning management systems should be deployed to facilitate timely feedback delivery, enable students to track progress across multiple assessments, and generate analytics informing instructional adjustments. While assessment diversity showed a slightly smaller direct effect on engagement ($\beta=.187$) compared to other curriculum variables, the quality of assessment practices fundamentally shapes student learning behaviors, and this recommendation addresses the study's finding that current assessment approaches remain insufficiently varied and provide inadequate formative feedback to support productive engagement.

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