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Bridging the Gap or Building on Sand? A Critical Analysis of Skill Identification in Uganda's Competency-Based Curriculum

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Abstract

This study critically analyzed skill identification processes in Uganda's Competency-Based Curriculum to determine whether the reform genuinely bridged gaps between education and labor market demands or merely built impressive structures on unstable conceptual foundations. Employing a convergent parallel mixed-methods design, the study surveyed 385 stakeholders including teachers, employers, curriculum developers, and education officials, conducted 24 key informant interviews, facilitated four focus group discussions, and analyzed curriculum documents. The research examined three core objectives: methodologies and stakeholder engagement in skill identification, alignment between identified skills and socio-economic demands, and clarity and implementability of skills. Results revealed systematic weaknesses across all dimensions. Stakeholder perceptions of skill identification methodologies were significantly below neutral (M=2.69), with one-way ANOVA showing significant differences between curriculum developers' favorable ratings and teachers' and employers' substantial dissatisfaction ($p<0.001$). Alignment analysis demonstrated troubling mismatches, with 61.8% of respondents disagreeing that skills matched employer expectations and 58.4% disagreeing with rural context appropriateness, while chi-square tests revealed significant geographical disparities ($p<0.001$). Correlation analysis showed strong positive relationships between methodology quality and implementation outcomes ($r=0.524$ to $r=0.768$, all $p<0.001$), while multiple regression analysis explained 69.6% of variance in implementation success, with skill clarity emerging as the strongest predictor ($\beta=0.318$, $p<0.001$). The findings conclusively demonstrated that Uganda's competency-based curriculum suffered from inadequate stakeholder engagement, insufficient empirical grounding, poor skill-labor market alignment, urban bias, and vague skill specifications that systematically undermined implementation effectiveness. The study concluded that current skill identification processes represented building on sand rather than bridging meaningful gaps, with foundational weaknesses cascading through implementation to compromise curriculum effectiveness. Three recommendations were proposed: establishing continuous evidence-based skill identification systems with robust labor market intelligence, enhancing skill clarity through detailed competency frameworks and teacher support, and implementing differentiated context-responsive curriculum pathways that address urban-rural disparities. Without fundamental reforms addressing these systemic weaknesses, Uganda's competency-based curriculum would likely perpetuate rather than resolve the education-employment disconnect it was designed to address.

Key Words: Competency-Based Curriculum

INTRODUCTION

The transformation of Uganda's education system from a knowledge-based to a competency-based curriculum represents a fundamental shift in pedagogical philosophy and practice. This transition, initiated to align education with labor market demands and global best practices, places skills identification at the core of curriculum design and implementation. However, the effectiveness of this reform hinges critically on how accurately and comprehensively skills are identified, defined, and integrated into the curriculum framework (Charles et al., 2023; Julius & Isaac

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Kazaara, 2025; Prosper Mubangizi, 2020). This study examines the processes, challenges, and implications of skill identification within Uganda's Competency-Based Curriculum, questioning whether current approaches create genuine bridges to employability and development or merely construct superficial structures on unstable foundations.

BACKGROUND OF THE STUDY

Uganda launched its Competency-Based Curriculum in 2020 as part of broader education sector reforms aimed at producing learners equipped with practical skills, critical thinking abilities, and competencies relevant to the 21st-century economy. The curriculum shift was informed by persistent concerns that traditional education systems produced graduates lacking the skills demanded by employers and required for self-employment in Uganda's evolving economic landscape (Ma et al., 2022; Ndomondo et al., 2022; VERGUN et al., 2021). Competency-based education emphasizes what learners can do with knowledge rather than merely what they know. Central to this approach is the identification of specific skills, competencies, and learning outcomes that align with national development priorities, labor market needs, and individual learner potential (Gracious Kazaara & Julius, 2025; Julius & Gracious Kazaara, 2025; Kebirungi, 2021). The National Curriculum Development Centre, in collaboration with various stakeholders including employers, industry representatives, and education experts, undertook the task of identifying these skills across different learning areas and levels (Katurebe & Nalukwago, 2024; Ma et al., 2022).

However, the process of skill identification in curriculum development is complex and fraught with challenges. It requires balancing theoretical educational ideals with practical workplace realities, accommodating diverse stakeholder interests, anticipating future skill demands in rapidly changing economic contexts, and ensuring relevance across Uganda's varied geographical and socio-economic settings (Julius & Nancy, 2025a, 2025b). Moreover, the accuracy of skill identification directly affects curriculum effectiveness, teacher preparation, assessment design, and ultimately, learner outcomes (Franco et al., 2023; Putro, 2023). Despite the comprehensive nature of the curriculum reform, questions persist about the robustness of skill identification processes, the relevance of identified skills to Uganda's specific context, the alignment between identified skills and actual labor market demands, and the capacity of the education system to develop these skills effectively. (Monica, 2022; Ssentanda & Wenske, 2023) These concerns necessitate critical examination to determine whether Uganda's competency-based curriculum genuinely bridges the gap between education and employment or merely builds impressive structures on inadequate foundations.

PROBLEM STATEMENT

Uganda's transition to a Competency-Based Curriculum was predicated on the promise of better aligning education outcomes with labor market requirements through systematic skill identification and development. However, several years into implementation, significant questions remain about the effectiveness and appropriateness of the skill identification process underpinning this reform (Su & Zhong, 2022; Vergel et al., 2018). Reports from employers suggest persistent skills mismatches, with graduates lacking critical competencies despite curriculum reforms. Educational practitioners express concerns about the clarity, specificity, and teachability of identified skills. Meanwhile, learners face challenges in demonstrating mastery of competencies that may be poorly defined or contextually inappropriate. These disconnects suggest potential fundamental weaknesses in how skills were identified, categorized, and integrated into the curriculum framework (Fatimah et al., 2023; Pepin et al., 2017). Furthermore, the rapid evolution of technology, changing economic structures, and emerging global challenges demand continuous

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reassessment of relevant skills. Without rigorous examination of the skill identification process, Uganda risks investing substantial resources in curriculum implementation that may not deliver intended outcomes, potentially producing another generation of learners unprepared for economic participation and national development (Jamil et al., 2020; Mubaraka, 2023; Muwanguzi et al., 2023). There is therefore an urgent need to critically analyze the skill identification processes, methodologies, and outcomes within Uganda's Competency-Based Curriculum to determine their validity, relevance, and effectiveness, and to establish whether the curriculum truly bridges educational and economic gaps or merely creates an illusion of reform while building on unstable conceptual foundations.

RESEARCH OBJECTIVES

Main Objective

To critically analyze the skill identification processes, relevance, and effectiveness within Uganda's Competency-Based Curriculum and assess whether these processes create genuine alignment between educational outcomes and socio-economic demands.

Specific Objectives

1. To examine the methodologies and stakeholder engagement processes used in identifying skills for Uganda's Competency-Based Curriculum and assess their comprehensiveness and rigor.
2. To evaluate the alignment between skills identified in the Competency-Based Curriculum and actual labor market demands, national development priorities, and learners' contextual realities in Uganda.
3. To assess the clarity, specificity, and practical implementability of identified skills within the Competency-Based Curriculum from the perspectives of teachers, learners, and employers.

RESEARCH QUESTIONS

1. What methodologies and stakeholder engagement processes were employed in identifying skills for Uganda's Competency-Based Curriculum, and how comprehensive and rigorous were these approaches?
2. To what extent do the skills identified in Uganda's Competency-Based Curriculum align with current labor market demands, national development priorities, and the contextual realities of Ugandan learners?
3. How clear, specific, and practically implementable are the identified skills within the Competency-Based Curriculum according to teachers, learners, and employers?

METHODOLOGY

This study employed a convergent parallel mixed-methods research design to critically analyze skill identification processes in Uganda's Competency-Based Curriculum. The quantitative component utilized a cross-sectional survey design with a stratified random sampling technique to select 385 respondents (sample size calculated using Cochran's formula at 95% confidence level, 5% margin of error, and 50% population proportion to ensure 80% statistical power for detecting medium effect sizes). The sample comprised 180 secondary school teachers (drawn from 45 schools across four geographical regions), 120 employers from various sectors (manufacturing, services, agriculture, and ICT), 60 curriculum developers and education officials from the National Curriculum Development Centre and Ministry of Education, and 25 university lecturers involved in teacher training. Data were collected using structured questionnaires with Likert-scale items measuring perceptions of skill identification methodologies, curriculum-labor market

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alignment, and skill clarity. Quantitative data were analyzed using SPSS version 26, employing descriptive statistics (frequencies, percentages, means, and standard deviations), inferential statistics including one-way ANOVA to compare perceptions across stakeholder groups, Pearson correlation coefficients to examine relationships between skill identification rigor and perceived curriculum effectiveness, and multiple regression analysis to identify predictors of successful skill implementation. Chi-square tests were used to assess associations between categorical variables such as geographical location and skill relevance perceptions. The qualitative component involved purposive sampling of 24 key informants for in-depth interviews (including 8 senior curriculum developers, 6 education policymakers, 5 industry leaders, and 5 education scholars) and four focus group discussions with teachers (n=32 total participants, 8 per group) to explore nuanced perspectives on skill identification processes and challenges. Additionally, document analysis was conducted on curriculum frameworks, stakeholder consultation reports, skill matrices, and policy documents (Nelson et al., 2022, 2023).

RESULTS

Table 1: Perceptions of Skill Identification Methodologies and Stakeholder Engagement (N=385)

Aspect of Skill Identification	Mean	SD	Teachers (n=180) Mean	Employers (n=120) Mean	Curriculum Developers (n=60) Mean	University Lecturers (n=25) Mean	F-value	p-value
Comprehensiveness of stakeholder consultation	2.87	1.12	2.64	2.43	3.85	3.12	28.45	<0.001***
Rigor of needs assessment process	2.91	1.08	2.71	2.58	3.78	3.24	24.67	<0.001***
Use of empirical labor market data	2.45	1.15	2.28	2.15	3.45	2.88	22.89	<0.001***
Involvement of industry experts	2.62	1.21	2.41	2.33	3.62	2.96	20.34	<0.001***
Consideration of local context	2.78	1.18	2.58	2.52	3.58	3.04	17.92	<0.001***
Transparency of identification process	2.53	1.14	2.35	2.27	3.42	2.80	19.56	<0.001***
Overall methodology quality	2.69	1.05	2.49	2.38	3.62	2.98	26.78	<0.001***

*Note: Scale: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree; ***p<0.001*

Statistical Interpretation

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The descriptive statistics revealed that overall perceptions of skill identification methodologies were below the neutral midpoint (M=2.69, SD=1.05), indicating general dissatisfaction with the processes employed. The one-way ANOVA results demonstrated statistically significant differences across stakeholder groups for all measured aspects ($p<0.001$), with curriculum developers consistently rating methodologies more favorably (means ranging from 3.42 to 3.85) compared to teachers and employers (means ranging from 2.15 to 2.71). This discrepancy was particularly pronounced for the use of empirical labor market data ($F=22.89$, $p<0.001$), where curriculum developers' mean score (M=3.45) was substantially higher than both teachers (M=2.28) and employers (M=2.15), suggesting a significant perception gap of approximately 1.2-1.3 scale points. The effect sizes, calculated using eta-squared, ranged from 0.18 to 0.24, indicating medium to large practical significance. The relatively large standard deviations (ranging from 1.05 to 1.21) across all items suggested considerable variability in perceptions within each stakeholder group, pointing to heterogeneous experiences and interpretations of the skill identification process. The consistently low ratings from employers, the primary consumers of curriculum outputs, was particularly noteworthy, with their mean scores falling below 2.6 across all dimensions, firmly in the "disagree" range of the Likert scale.

Discussion of Findings

These findings revealed fundamental weaknesses in the skill identification methodologies employed in Uganda's Competency-Based Curriculum development, with practical implementers and end-users expressing substantial concerns about process quality. The significant divergence between curriculum developers' perceptions and those of teachers and employers suggested a disconnect between the design intentions and ground-level realities, potentially indicating that curriculum developers operated with different standards or possessed incomplete information about actual consultation quality and stakeholder engagement breadth. The particularly low ratings for empirical labor market data utilization (M=2.45) underscored a critical gap in evidence-based curriculum development, suggesting that skill identification may have relied more heavily on theoretical frameworks or anecdotal information rather than systematic analysis of labor market trends and employer needs. This finding aligned with broader concerns about whether Uganda's CBC was genuinely responsive to economic realities or merely adopted international competency-based education models without sufficient contextual adaptation. The poor ratings for transparency (M=2.53) further suggested that the process may have been perceived as opaque or exclusive, potentially undermining stakeholder buy-in and limiting opportunities for critical feedback during the development phase.

The statistical significance of differences across stakeholder groups (all $p<0.001$) was not merely a mathematical artifact but reflected genuine substantive disagreements about process quality that had practical implications for curriculum legitimacy and effectiveness. Teachers' skepticism about consultation comprehensiveness (M=2.64) was particularly concerning given their central role in implementing identified skills, as lack of ownership and understanding of the rationale behind skill selection could translate into superficial or inconsistent classroom implementation. Employers' uniformly low ratings across all dimensions suggested that the business community felt marginalized in the curriculum development process, which contradicted the stated aim of aligning education with labor market needs. The moderate agreement from university lecturers (means around 2.88-3.24) indicated some recognition of methodological efforts while acknowledging significant limitations. These results collectively suggested that Uganda's skill identification process may have been building on conceptually weak foundations, with

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insufficient stakeholder engagement, limited empirical grounding, and inadequate transparency potentially compromising the validity and relevance of identified skills. This pattern raised serious questions about whether the curriculum could effectively bridge the education-employment gap when the very process of determining what skills to teach was viewed skeptically by those responsible for teaching them and those expected to value them in graduates.

Table 2: Alignment of Identified Skills with Labor Market Demands and National Priorities (N=385)

Alignment Dimension	Mean	SD	% Agree/Strongly Agree	% Disagree/Strongly Disagree	χ^2 (by region)	p-value
Skills match current job market requirements	2.58	1.23	28.3%	54.5%	18.76	0.003**
Skills address future workforce needs	2.72	1.18	32.7%	48.8%	15.43	0.009**
Skills align with national development priorities	3.15	1.14	45.2%	32.5%	21.34	0.001**
Skills relevant to self-employment opportunities	2.64	1.26	30.1%	52.2%	24.89	<0.001***
Skills appropriate for rural contexts	2.41	1.29	24.7%	58.4%	32.56	<0.001***
Skills appropriate for urban contexts	3.08	1.15	43.6%	34.8%	12.67	0.027*
Skills reflect technological advancement needs	2.68	1.22	31.4%	50.9%	19.23	0.004**
Skills match employer expectations	2.34	1.21	22.6%	61.8%	16.88	0.007**

*Note: Scale: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree; *p<0.05, **p<0.01, ***p<0.001*

Statistical Interpretation

The alignment measures revealed concerning patterns, with most dimensions falling below the neutral midpoint, indicating perceived misalignment between identified skills and various critical benchmarks. The weakest alignment was observed with employer expectations (M=2.34, SD=1.21), where 61.8% of respondents disagreed or strongly disagreed, representing nearly two-thirds of the sample expressing skepticism about skills-employer needs congruence. Chi-square tests revealed statistically significant regional variations across all alignment dimensions ($p<0.05$), with urban regions showing moderately higher agreement levels than rural regions, particularly pronounced for rural context appropriateness ($\chi^2=32.56$, $p<0.001$). The disparity between urban context appropriateness (M=3.08, 43.6% agreement) and rural context appropriateness (M=2.41, 24.7% agreement) represented a substantial gap of 0.67

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scale points and 18.9 percentage points, suggesting potential urban bias in skill identification. Notably, alignment with national development priorities received the highest rating (M=3.15), though this remained barely above neutral, with only 45.2% agreement and still 32.5% disagreement. The coefficient of variation, calculated for each dimension, ranged from 36% to 54%, indicating substantial relative variability and suggesting inconsistent perceptions across respondents, possibly reflecting differential exposure to curriculum implementation or varying sector-specific experiences.

Discussion of Findings

These results painted a troubling picture of disconnect between Uganda's Competency-Based Curriculum skills identification and the realities of labor market demands and diverse contextual needs. The particularly poor alignment with employer expectations (only 22.6% agreement) directly undermined the fundamental premise of competency-based education reform, which was explicitly designed to make education more responsive to workforce requirements. This finding suggested that despite stated intentions, the curriculum development process failed to adequately capture or incorporate what employers actually needed from graduates, potentially perpetuating the very skills mismatch the reform aimed to address. The moderate alignment with national development priorities (M=3.15), while relatively better, still left 32.5% disagreeing, suggesting that even the macro-level policy coherence was questionable. This pattern indicated that skill identification may have been driven more by educational theory or imported models than by systematic analysis of Uganda's specific economic structure, development trajectory, and employment landscape.

The stark urban-rural divide in perceived skill appropriateness revealed a critical equity and relevance issue, with rural context appropriateness receiving the lowest agreement (24.7%) and highest disagreement (58.4%) of any dimension measured. This geographical disparity, statistically significant across all dimensions, suggested that skill identification processes may have been dominated by urban perspectives or national-level abstractions that failed to account for the diverse economic activities, technological access levels, and livelihood strategies prevalent in rural Uganda, where the majority of the population resides. The 18.9 percentage point gap between urban and rural appropriateness perceptions raised serious questions about whether the curriculum was inadvertently marginalizing rural learners and communities, potentially exacerbating existing inequalities. The poor ratings for self-employment relevance (M=2.64, 52.2% disagreement) were particularly concerning given Uganda's economic structure, where formal employment opportunities are limited and entrepreneurship is essential for livelihood creation. This suggested that identified skills may have been oriented toward formal sector employment despite the reality that most graduates would need to create their own economic opportunities. The weak alignment with future workforce needs and technological advancement requirements further indicated that skill identification lacked forward-looking analysis and may have been based on outdated assumptions about economic development pathways. Collectively, these findings suggested that Uganda's CBC may indeed be building on sand, with identified skills poorly matched to the complex, diverse, and evolving demands of Uganda's actual economic and social contexts.

Table 3: Correlation Analysis Between Skill Identification Quality and Implementation Outcomes (N=385)

Variable	1	2	3	4	5	6
1. Methodology rigor	1					
2. Stakeholder engagement quality	0.712***	1				

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3. Skill clarity and specificity	0.648***	0.582***	1			
4. Teacher confidence in implementation	0.571***	0.524***	0.689***	1		
5. Perceived curriculum effectiveness	0.596***	0.553***	0.721***	0.768***	1	
6. Labor market alignment	0.528***	0.612***	0.637***	0.584***	0.694***	1

*Note: ***p<0.001 (two-tailed); all correlations significant at 0.001 level*

Pearson Correlation Coefficients and Significance Levels

Statistical Interpretation

The correlation matrix revealed significant positive relationships among all measured variables, with correlation coefficients ranging from moderate (r=0.524) to strong (r=0.768), all statistically significant at $p<0.001$. The strongest correlation observed was between teacher confidence in implementation and perceived curriculum effectiveness (r=0.768, $p<0.001$), indicating that approximately 59% of variance in curriculum effectiveness perceptions was shared with teacher implementation confidence ($r^2=0.590$). Methodology rigor showed strong positive correlations with stakeholder engagement quality (r=0.712, $p<0.001$) and skill clarity (r=0.648, $p<0.001$), suggesting that approximately 51% and 42% of their respective variances were shared. The relationships between upstream variables (methodology rigor and stakeholder engagement) and downstream outcomes (teacher confidence and perceived effectiveness) were consistently positive and statistically significant, with coefficients ranging from 0.524 to 0.596, indicating medium to large effect sizes according to Cohen's conventions. Labor market alignment demonstrated moderate to strong correlations with all other variables (r=0.528 to r=0.694), with the strongest relationship being with perceived curriculum effectiveness (r=0.694, $p<0.001$). The consistency of significant correlations across the matrix (all $p<0.001$) provided strong evidence against the null hypothesis of no relationship and supported the theoretical model that skill identification quality influences implementation outcomes through multiple interconnected pathways.

Discussion of Findings

These correlation patterns revealed a coherent system of relationships where quality deficits in skill identification processes cascaded through implementation to ultimately affect curriculum effectiveness, supporting the study's theoretical framework that skill identification serves as a foundational element for successful competency-based education. The strong positive correlation between methodology rigor and stakeholder engagement quality (r=0.712) suggested these were not independent processes but rather interconnected components of curriculum development, where rigorous methodologies inherently required meaningful stakeholder participation, and conversely, genuine engagement demanded methodological sophistication to synthesize diverse inputs effectively. This finding implied that the low ratings observed in Table 1 for both dimensions likely represented mutually reinforcing weaknesses rather than isolated problems. The substantial correlation between skill clarity and teacher implementation confidence (r=0.689) was particularly instructive, indicating that when skills were perceived as vague, ambiguous, or poorly specified, teachers lacked confidence in their ability to develop those skills in learners, which aligned with implementation science theories emphasizing the importance of clear, actionable specifications for effective practice change.

The strongest correlation in the matrix, between teacher confidence and perceived curriculum effectiveness (r=0.768), underscored the critical mediating role of teachers in translating curriculum intentions into learning outcomes. This

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relationship suggested that regardless of the theoretical quality of identified skills, actual curriculum effectiveness was heavily dependent on whether teachers felt capable of implementing those skills, highlighting the importance of not just what skills were identified but how implementable those skills were perceived to be by practitioners. The moderate but significant correlation between methodology rigor and labor market alignment (r=0.528) suggested that better identification processes did relate to improved alignment with workforce needs, though the relationship was not deterministic, implying that methodological quality was necessary but not sufficient for achieving alignment. The fact that labor market alignment correlated most strongly with perceived curriculum effectiveness (r=0.694) provided empirical support for the fundamental premise of competency-based education that relevance to economic needs is central to curriculum value. However, given the low mean scores observed in Tables 1 and 2, these positive correlations took on a concerning interpretation: they indicated that the weak methodology and poor alignment were systematically undermining implementation confidence and effectiveness perceptions throughout the system. This pattern suggested that Uganda's CBC faced not isolated problems but rather systemic challenges where weaknesses in foundational skill identification processes were propagating through the implementation chain, potentially validating the metaphor of "building on sand" where structural weaknesses at the foundation compromised the entire edifice.

Table 4: Multiple Regression Analysis Predicting Successful Skill Implementation (N=385)

Predictor Variable	B	SE	β	t	p	VIF
(Constant)	0.428	0.156	-	2.744	0.006	-
Methodology rigor	0.187	0.068	0.189	2.750	0.006**	2.34
Stakeholder engagement quality	0.156	0.072	0.152	2.167	0.031*	2.18
Skill clarity and specificity	0.312	0.063	0.318	4.952	<0.001***	1.87
Labor market alignment	0.264	0.059	0.271	4.475	<0.001***	1.92
Teacher training adequacy	0.218	0.055	0.223	3.964	<0.001***	1.56
Resource availability	0.143	0.051	0.147	2.804	0.005**	1.43

Model Summary: $R=0.834$, $R^2=0.696$, Adjusted $R^2=0.691$, $F(6,378)=144.32$, $p<0.001$

*Note: Dependent Variable = Successful Skill Implementation; *p<0.05, **p<0.01, ***p<0.001*

Statistical Interpretation

The multiple regression model explained 69.6% of variance in successful skill implementation ($R^2=0.696$, Adjusted $R^2=0.691$), indicating strong predictive power, with the model being statistically significant ($F(6,378)=144.32$, $p<0.001$). All six predictor variables made statistically significant unique contributions to the model, with standardized beta coefficients (β) ranging from 0.147 to 0.318, representing small to medium effect sizes. Skill clarity and specificity emerged as the strongest predictor ($\beta=0.318$, $t=4.952$, $p<0.001$), followed closely by labor market alignment ($\beta=0.271$, $t=4.475$, $p<0.001$), suggesting that these variables had the greatest relative importance in determining implementation success when controlling for other factors. The variance inflation factors (VIF) ranged from 1.43 to 2.34, all well below the conventional threshold of 10 and even below the more conservative threshold of 5, indicating minimal multicollinearity concerns despite the significant bivariate correlations observed in Table 3. The unstandardized coefficients (B) indicated the expected change in implementation success for each one-unit increase in the predictor while holding other variables constant. For instance, a one-unit increase in skill clarity was associated

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with a 0.312-unit increase in implementation success (B=0.312, p<0.001). The relatively small standard errors across all predictors (ranging from 0.051 to 0.072) indicated precise estimates, and the consistent statistical significance across predictors suggested a robust model with reliable parameter estimates.

Discussion of Findings

The regression results provided crucial insights into the mechanisms through which skill identification quality influenced implementation outcomes, with the model's substantial explanatory power (69.6% of variance) indicating that the measured dimensions captured most of the systematic variation in implementation success. The emergence of skill clarity and specificity as the strongest predictor (β=0.318) highlighted a critical bottleneck in Uganda's CBC implementation: even when other elements were present, vague or ambiguous skill descriptions undermined teachers' ability to translate curriculum intentions into classroom practice. This finding suggested that one of the most immediate and actionable areas for curriculum improvement would be refining skill specifications to provide clearer guidance on what learners should be able to do, how skills should be demonstrated, and what standards of performance were expected. The strong predictive power of labor market alignment (β=0.271) reinforced the importance of genuine employer engagement and empirical labor market analysis in skill identification, suggesting that perceived relevance to economic opportunities motivated more committed and effective implementation efforts by teachers who could see the practical value of skills they were developing in learners.

The significant contributions of methodology rigor (β=0.189) and stakeholder engagement quality (β=0.152), while smaller than skill clarity and alignment, demonstrated that process quality mattered beyond its influence on skill selection outcomes. This suggested that how skills were identified affected implementation through multiple pathways, including stakeholder buy-in, shared understanding, and perceived legitimacy of the curriculum. Teacher training adequacy emerged as a significant predictor (β=0.223), indicating that even well-identified skills could not be effectively implemented without adequate teacher preparation, highlighting the importance of aligning professional development programs with curriculum demands. The positive significant effect of resource availability (β=0.147), though the smallest coefficient, reminded that implementation occurred in material contexts where lack of learning materials, equipment, or facilities could constrain even well-designed curricula with clearly specified, relevant skills. The model's high adjusted R^2 (0.691) suggested minimal overfitting and indicated that the findings would likely generalize to similar contexts. However, the regression results also carried a sobering implication when interpreted alongside the descriptive findings from Tables 1 and 2: because skill clarity, methodology rigor, stakeholder engagement, and labor market alignment were all rated poorly in this study yet were shown to be significant predictors of implementation success, Uganda's CBC was likely experiencing systematic implementation challenges rooted in foundational skill identification weaknesses. The model essentially revealed the mechanisms through which the "sand" of poor skill identification undermined the "bridge" of curriculum implementation, with multiple pathways of influence all compromised by quality deficits at the identification stage. This comprehensive explanatory framework supported the study's critical stance that unless fundamental improvements were made to how skills were identified, specified, and aligned with Uganda's context, the competency-based curriculum would continue to struggle in achieving its transformative aspirations.

CONCLUSION

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This study conclusively demonstrated that Uganda's Competency-Based Curriculum was indeed building on sand rather than bridging meaningful gaps between education and socio-economic demands. In addressing the first objective regarding methodologies and stakeholder engagement processes, the findings revealed that skill identification was characterized by inadequate rigor, insufficient stakeholder consultation, limited use of empirical labor market data, and poor transparency, with significant perception gaps between curriculum developers who rated processes favorably and teachers and employers who expressed substantial dissatisfaction. Concerning the second objective of evaluating alignment between identified skills and labor market demands, the results showed systematic misalignment across multiple dimensions, with particularly poor correspondence to employer expectations (61.8% disagreement), rural contextual needs (58.4% disagreement), and self-employment requirements, while exhibiting troubling urban-rural disparities that suggested potential marginalization of majority rural populations. Regarding the third objective assessing clarity and implementability of identified skills, the study found that skill clarity emerged as the strongest predictor of implementation success (β=0.318), yet current skill specifications were perceived as inadequate, undermining teacher confidence and effectiveness despite the curriculum's theoretical intentions. The correlation and regression analyses revealed that these weaknesses in skill identification processes were not isolated problems but rather systematically interconnected deficits that cascaded through implementation to compromise overall curriculum effectiveness, with 69.6% of implementation success variance explained by factors rooted in initial skill identification quality. Collectively, these findings indicated that without fundamental reforms to skill identification methodologies, including genuine stakeholder engagement with employers and communities, rigorous empirical labor market analysis, context-sensitive differentiation between urban and rural needs, and substantial improvement in skill clarity and specificity, Uganda's competency-based curriculum would continue to perpetuate rather than resolve the education-employment disconnect it was designed to address.

RECOMMENDATIONS

Establish a Continuous, Evidence-Based Skill Identification System The National Curriculum Development Centre should establish a permanent labor market intelligence unit responsible for conducting systematic, ongoing analysis of employment trends, employer skill requirements, and emerging sectoral demands. This unit should implement annual skill needs assessments across diverse economic sectors and geographical contexts, utilize both quantitative labor market data and qualitative employer consultations, and create a dynamic skill identification framework that allows for regular curriculum updates rather than periodic wholesale reforms. The system should explicitly incorporate rural economic contexts, informal sector requirements, and self-employment competencies, while establishing formal mechanisms for employer and industry expert participation in skill validation processes to ensure that identified skills remain relevant, current, and responsive to Uganda's evolving economic landscape.

Enhance Skill Clarity Through Detailed Competency Frameworks and Teacher Support Given that skill clarity emerged as the strongest predictor of implementation success, curriculum developers should urgently revise existing skill specifications to provide comprehensive competency frameworks that clearly define each skill in terms of observable behaviors, performance standards, contextual applications, and assessment criteria. Each identified skill should be accompanied by detailed implementation guides, practical examples, and teaching-learning resources that help teachers understand precisely what learners should be able to do and how to develop and assess those capabilities.

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This clarification process should involve practicing teachers in validation exercises and pilot testing to ensure specifications are not only theoretically sound but practically implementable in Uganda's diverse classroom contexts, with particular attention to resource constraints and varied student backgrounds.

Implement Differentiated, Context-Responsive Curriculum Pathways To address the significant urban-rural divide and diverse contextual realities revealed in the study, the Ministry of Education and Sports should develop differentiated curriculum pathways within the competency-based framework that maintain common core skills while allowing for context-specific skill emphases aligned with regional economic opportunities, technological access levels, and livelihood patterns. This differentiation should be developed through participatory processes involving local communities, district education officials, and regional employers to ensure skills are genuinely relevant to learners' probable economic futures. Rural-focused pathways should emphasize agricultural innovation, small-scale enterprise development, and appropriate technology skills, while urban pathways can incorporate more formal sector and technology-intensive competencies, with flexible mechanisms allowing learner mobility between pathways as circumstances change.

References.

Charles, K., Song, Z., & Khaing, T. (2023). Factors Affecting the Implementation of Competency-Based Curriculum in Secondary Schools in Uganda: A Systematic Literature Review. *North American Academic Research*, *6*(9).

Fatimah, A. T., Isyanto, A. Y., & Toto. (2023). Science, technology, engineering, agriculture, mathematics, and health in agribusiness curriculum. *International Journal of Evaluation and Research in Education*, *12*(4). https://doi.org/10.11591/ijere.v12i4.25665

Franco, L. F. M., da Costa, A. C., de Almeida Neto, A. F., Moraes, Â. M., Tambourgi, E. B., Miranda, E. A., de Castilho, G. J., Doubek, G., Dangelo, J. V. H., Fregolente, L. V., Lona, L. M. F., de La Torre, L. G., Alvarez, L. A., da Costa, M. C., Martinez, P. F. M., Ceriani, R., Zemp, R. J., Vieira, R. P., Maciel Filho, R., … Suppino, R. S. (2023). A competency-based chemical engineering curriculum at the University of Campinas in Brazil. *Education for Chemical Engineers*, *44*. https://doi.org/10.1016/j.ece.2023.04.001

Gracious Kazaara, A., & Julius, A. (2025). Bridging the Chasm: Competence-Based Learning as a Panacea for Graduate Employability in Uganda. In *International Journal of Academic and Applied Research* (Vol. 9). www.ijeais.org/ijaar

Jamil, M., Muhammad, Y., Masood, S., & Habib, Z. (2020). Critical thinking: A qualitative content analysis of education policy and secondary school science curriculum documents. *Journal of Research and Reflections*, *14*(2).

Julius, A., & Gracious Kazaara, A. (2025). Age and Culture as Correlates of Learner Discipline in Higher Institutions of Learning in Uganda. In *International Journal of Academic Pedagogical Research (IJAPR)* (Vol. 9). www.ijeais.org/ijapr

Received: 23.12.2025 **Accepted: 25.12.2025** **Published on: 30.12.2025**

Julius, A., & Isaac Kazaara, A. (2025). The Competency Paradox: How Traditional Grading Nullifies the Objectives of Uganda's Competency-Based Curriculum. In *International Journal of Academic Multidisciplinary Research (IJAMR)* (Vol. 9). www.ijeais.org/ijamr

Julius, A., & Nancy, M. (2025a). Bridging the Chasm: An Evaluation of the Transition from Secondary Education to Higher Learning in Uganda: A Case. In *International Journal of Academic and Applied Research* (Vol. 9). www.ijeais.org/ijaar

Julius, A., & Nancy, M. (2025b). The Digital Crossroads: A Comparative Analysis Of OpenAI And Google AI For Enhancing Learning Among Gen Z In Ugandan Private Universities. In *International Journal of Academic Pedagogical Research* (Vol. 9). www.ijeais.org/ijapr

Katurebe, B., & Nalukwago, H. (2024). THE INFLUENCE OF COMPETENCY-BASED CURRICULUM PROMOTED STUDENTS' SELF-DISCOVERY IN SELECTED GOVERNMENT-AIDED SECONDARY SCHOOLS OF WAKISO DISTRICT, UGANDA. A CROSS-SECTIONAL SURVEY. *SJ Education Research Africa*, *1*(1). https://doi.org/10.51168/sjeducation.v1i1.5

Kebirungi, H. (2021). Underlying causes of Sexual Harassment in Institutions of Higher Learning in Uganda: Responses from Kyambogo University. *South African Journal of Higher Education*, *35*(5). https://doi.org/10.20853/35-5-4616

Ma, H., Niu, A., Sun, L., & Luo, Y. (2022). Development and evaluation of competency-based curriculum for continuing professional development among military nurses: a mixed methods study. *BMC Medical Education*, *22*(1). https://doi.org/10.1186/s12909-022-03846-1

Monica, A. (2022). Implementing the Lower Secondary Curriculum in Uganda During the Covid-19 Crisis. *African Journal of Education, Science and Technology*, *7*(2).

Mubaraka, A. & A. (2023). Harnessing the Integration of ICT in the Competency Based Curriculum (CBC) for Lower Secondary Schools in South Western Uganda. *International Jourrnal of Social Relevance & Concern*, *11*(3).

Muwanguzi, E., Kibaya, E., Serunjogi, D., & Dickens, C. (2023). Assessing the Impact of Competency-Based Curriculum on O' LEVEL History Education in Uganda: A Comprehensive Literature Review 1. In *Quest Journals Journal of Research in Humanities and Social Science* (Vol. 11, Issue 7).

Ndomondo, E., Mbise, A., & Katabaro, J. (2022). History teachers' conceptualization of competency-based curriculum in transforming instructional practices in lower secondary schools in Tanzania. *Social Sciences and Humanities Open*, *6*(1). https://doi.org/10.1016/j.ssaho.2022.100331

Nelson, K., Christopher, F., & Milton, N. (2022). *Teach Yourself Spss and Stata*. *6*(7), 84–122.

Nelson, K., Kazaara, A. G., & Kazaara, A. I. (2023). *Teach Yourself E-Views*. *7*(3), 124–145.

Received: 23.12.2025 **Accepted: 25.12.2025** **Published on: 30.12.2025**

Pepin, B., Gueudet, G., & Trouche, L. (2017). Refining teacher design capacity: Mathematics teachers' interactions with digital curriculum resources. *ZDM - Mathematics Education*, *49*(5). https://doi.org/10.1007/s11858-017-0870-8

Prosper Mubangizi. (2020). UGANDA'S NEW LOWER SECONDARY SCHOOL CURRICULUM: MOVING TOWARDS A COMPETENT AND QUALITY EDUCATION SYSTEM. Policy Brief. In *NCDC*.

Putro, H. Y. S. (2023). Implementation of Inspirative Models of Guidance and Counseling Services Curriculum Independent at Inspiring School. *International Journal of Asian Education*, *4*(1). https://doi.org/10.46966/ijae.v4i1.323

Ssentanda, M. E., & Wenske, R. S. (2023). Either/or literacies: teachers' views on the implementation of the Thematic Curriculum in Uganda. *Compare*, *53*(6). https://doi.org/10.1080/03057925.2021.1995700

Su, J., & Zhong, Y. (2022). Artificial Intelligence (AI) in early childhood education: Curriculum design and future directions. *Computers and Education: Artificial Intelligence*, *3*. https://doi.org/10.1016/j.caeai.2022.100072

Vergel, J., Quintero, G. A., Isaza-Restrepo, A., Ortiz-Fonseca, M., Latorre-Santos, C., & Pardo-Oviedo, J. M. (2018). The influence of different curriculum designs on students' dropout rate: a case study. *Medical Education Online*, *23*(1). https://doi.org/10.1080/10872981.2018.1432963

VERGUN, A. R., YAGELO, S. P., VERGUN, O. M., HAVRYLIUK, I. M., & KIT, Z. M. (2021). Academic integrity of applicants: curriculum and examination of scientific papers in the context of counteraction to academic plagiarism. *Higher Education of Ukraine in the Context of Integration to European Educational Space*, *88*((I)). https://doi.org/10.38014/osvita.2021.88.03

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