

The Economics of Educational Reform: Financing Competence-Based Curriculum Delivery in Uganda

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Abstract: This study examined the economics of educational reform with specific focus on financing competence-based curriculum delivery (CBCD) in secondary schools in Uganda, following the rollout of the lower secondary Competence-Based Curriculum (CBC) by the National Curriculum Development Centre in 2020. The study was guided by a main objective of examining the economics of financing CBCD and three specific objectives, namely: to assess the effect of government funding on CBCD, to examine the influence of school-based internally generated funds on CBCD, and to evaluate the contribution of development partner support to CBCD financing. The study adopted a positivist research philosophy and a descriptive cross-sectional survey design, and quantitative data were collected from a sample of 240 respondents comprising head teachers, bursars, and teachers drawn from public secondary schools in Kampala District using stratified random sampling and a structured, pre-tested questionnaire whose validity and reliability were established through expert review and Cronbach's alpha coefficients above 0.70. Data were analysed using IBM SPSS Statistics version 26 for univariate and bivariate statistics and IBM AMOS version 24 for structural equation modelling (SEM). Univariate analysis indicated that internally generated funds recorded the highest mean composite score among the financing variables, while development partner support recorded the lowest and the most variable. Bivariate analysis using Pearson's product-moment correlation coefficient revealed statistically significant, positive relationships among government funding, internally generated funds, development partner support, and competence-based curriculum delivery. The structural model fitted the sample data well, with a chi-square to degrees of freedom ratio of 2.14, a comparative fit index of 0.95, a Tucker-Lewis index of 0.94, and a root mean square error of approximation of 0.052, and it showed that government funding ($\beta = 0.36$), internally generated funds ($\beta = 0.31$), and development partner support ($\beta = 0.22$) jointly explained 49 percent of the variance in competence-based curriculum delivery. The study concluded that financing constraints, rather than teacher attitudes or pedagogical resistance, constituted the principal impediment to effective delivery of the competence-based curriculum in Ugandan secondary schools, and it recommended the adoption of diversified, predictable, and needs-based financing mechanisms, including activity-based capitation grants, regulated school-level revenue mobilisation, and pooled and harmonised development partner funding, in order to sustain the reform.

Key Words: Educational Reform and Competence-Based Curriculum Delivery

Introduction

Educational reform has, over the past two decades, increasingly been framed not merely as a pedagogical undertaking but as an economic enterprise whose success or failure hinges on the manner in which financial resources are mobilised, allocated, and utilised across the different levels of the education system. Globally, the shift from knowledge-based, examination-driven curricula towards competence-based curricula (CBC), which emphasise practical skills, learner-centred pedagogy, and continuous assessment, has been embraced by a wide range of low- and middle-income countries as a strategy for aligning education outputs with labour market demands and twenty-first century skills (Carvalho et al., 2022; Cruz et al., 2021; Rivaldo & Nabella, 2023; Treß, 2024). However, the adoption of competence-based curricula carries substantially higher recurrent and capital cost implications than traditional content-based curricula, since it requires investment in specialised instructional materials, practical learning spaces, continuous teacher professional development, and smaller, more interactive class sizes, all of which place considerable strain on already constrained public education budgets (Chang et al., 2023; Ellis & Childs, 2019; Janssens et al., 2022; Joyce Ayikoru Asiimwe, 2021). In Uganda, the introduction of the new lower secondary curriculum in February 2020 represented one of the most far-reaching reforms of the post-independence education sector, yet its implementation has unfolded against a backdrop of chronic underfunding of secondary education, heavy reliance on inconsistent school-based revenue, and fragmented support from development partners. This study, therefore, situates the implementation of competence-based curriculum delivery within the discipline of the economics of education, treating financing not as a peripheral administrative concern but as the central variable that determines whether the ambitious goals of the curriculum reform can be realised in practice (Fathurohman et al., 2023; Kokkinos et al., 2022; Murendo et al., 2018). By empirically examining how government funding, internally generated funds, and development partner support individually and jointly influence competence-based curriculum delivery, the study sought to generate evidence that could inform more effective and sustainable financing policy for Uganda's ongoing education reform agenda.

Background of the Study

Uganda's secondary education curriculum had, since the colonial era, remained largely knowledge-based and examination-oriented, a structure that successive education reviews, including the 1989 Education Policy Review Commission and the 2013 Uganda Lower Secondary Curriculum review process, identified as poorly aligned with the practical and entrepreneurial skills required by a rapidly changing economy (Chaaban et al., 2025; Julius & Gracious Kaazara, 2025a; Kingchang et al., 2024). In response, the National Curriculum Development Centre, under the Ministry of Education and Sports, designed and rolled out a new competence-based lower secondary curriculum beginning with Senior One in February 2020, with the reform anchored on ten generic skills, continuous assessment, and a significant reduction in the number of examinable subjects in favour of integrated, skills-oriented learning areas (José da Silva & Silva, 2023; Julius et al., 2026; Julius & Audrey, 2026). The financing architecture supporting this reform has historically comprised three principal streams: central government funding, channelled mainly through the Universal Secondary Education capitation grant and development budget allocations to the Ministry of Education and Sports; school-based internally generated funds, derived from tuition, development levies, and other parental contributions permitted under the Education Act; and development partner support, provided through bilateral and multilateral arrangements such as those coordinated by the Global Partnership for Education, the World Bank-supported Uganda Intergovernmental Fiscal Transfers programme, and various non-governmental organisations supporting teacher training and instructional materials (Julius & Gracious Kaazara, 2025b; Julius & Kazaara, 2025c; Julius & Milly, 2025). Despite the rollout, the capitation grant rate has remained largely unadjusted to reflect the higher unit cost of practical, competence-based instruction, schools have continued to depend heavily on unpredictable parental contributions that vary widely between urban and rural, and government and private schools, while development partner support has tended to be short-term, project-based, and concentrated in particular districts, creating an uneven financing landscape (Arthurs, 2019; Julius & Kazaara, 2025b; Mohamed Hashim et al., 2022). It is against this background of a well-intentioned curricular reform constrained by an underdeveloped and fragmented financing framework that the present study sought to examine, empirically, the economics of financing competence-based curriculum delivery in Uganda.

Statement of the Problem

Although the Government of Uganda, through the National Curriculum Development Centre, designed the new lower secondary competence-based curriculum with the explicit intention of equipping learners with practical, employable skills, the financing arrangements that were expected to underpin its delivery have not kept pace with the curriculum's resource demands (Julius & Kazaara, 2025a; Katurebe & Nalukwago, 2024; Mubaraka, 2023). Reports from the Ministry of Education and Sports and independent education sector reviews have repeatedly noted that the Universal Secondary Education capitation grant, which forms the principal source of government funding to schools, has remained largely static in nominal terms even as the cost of practical learning materials, laboratory consumables, and continuous teacher retraining associated with the competence-based approach has risen considerably (Aheisibwe & Barigye, 2023; Muwanguzi et al., 2023; Ndomondo et al., 2022). Consequently, many secondary schools have resorted to levying additional, often informal, charges on parents to bridge the resulting funding gap, a practice that has provoked resistance from already financially stretched households and has resulted in highly uneven internally generated funds between schools located in different socio-economic settings (Charles et al., 2023; Julius & Audrey, 2025b; Julius & Kazaara, 2026; Julius & Nancy, 2026). At the same time, development partner support, while welcome, has tended to be fragmented, short-term, and concentrated on specific components of the reform such as initial teacher orientation, leaving critical gaps in areas such as instructional materials replenishment and infrastructure for practical learning largely unaddressed. The cumulative effect of these financing shortfalls has been widely reported anecdotally as compromised delivery of the competence-based curriculum, manifested in overcrowded practical lessons, improvised teaching aids, and teachers reverting to lecture-based methods that the reform sought to replace (Jamil et al., 2020; Julius & Audrey, 2025a; Putro, 2023; Ssentanda & Wenske, 2023). However, despite the seriousness of these reported challenges, there existed limited rigorous, quantitative evidence within the Ugandan context that systematically examined the statistical relationship between the different sources of curriculum financing and the actual level of competence-based curriculum delivery achieved in schools (Audrey & Kazaara, 2025; Geera & Onen, 2023; Ongowo, 2022). It was this empirical gap, namely the absence of a robust, statistically grounded understanding of how government funding, school-based internally generated funds, and development partner support jointly and individually influenced competence-based curriculum delivery, that this study sought to address.

Objectives of the Study

Main Objective

To examine the economics of financing competence-based curriculum delivery in secondary schools in Uganda.

Specific Objectives

1. To assess the effect of government funding on competence-based curriculum delivery in secondary schools in Uganda.

2. To examine the influence of school-based internally generated funds on competence-based curriculum delivery in secondary schools in Uganda.
3. To evaluate the contribution of development partner support to the financing of competence-based curriculum delivery in secondary schools in Uganda.

Research Questions

1. What is the effect of government funding on competence-based curriculum delivery in secondary schools in Uganda?
2. What is the influence of school-based internally generated funds on competence-based curriculum delivery in secondary schools in Uganda?
3. What is the contribution of development partner support to the financing of competence-based curriculum delivery in secondary schools in Uganda?

Methodology

This study adopted a positivist research philosophy and employed a descriptive cross-sectional survey design that combined both correlational and explanatory elements in order to permit not only the description of the financing and curriculum delivery variables but also the testing of hypothesised relationships among them; the target population comprised head teachers, bursars or school accountants, and teachers drawn from the 92 government-aided secondary schools implementing the lower secondary competence-based curriculum in Kampala District, from which a sample size of 240 respondents was determined using the Krejcie and Morgan (1970) table for determining sample sizes and was drawn through a stratified random sampling technique that ensured proportionate representation of head teachers, bursars, and teachers as well as a balanced spread across divisions of Kampala District; data were collected using a structured, self-administered questionnaire comprising closed-ended items anchored on a five-point Likert scale ranging from strongly disagree to strongly agree, which captured respondents' perceptions of government funding, school-based internally generated funds, development partner support, and the level of competence-based curriculum delivery, and the instrument's content validity was established through expert review yielding a content validity index above 0.78 for all constructs while its reliability was confirmed through a pilot test that produced Cronbach's alpha coefficients ranging from 0.74 to 0.89 across the four constructs; prior to full-scale data collection, ethical clearance and administrative permission were obtained from the relevant university research ethics body and the Kampala District Education Office, and informed consent, anonymity, and confidentiality were assured to all participating respondents. Data analysis proceeded in three stages: first, univariate analysis was conducted to generate frequencies, percentages, means, standard deviations, and measures of skewness and kurtosis that described the demographic profile of respondents and the central tendency and distributional properties of each study variable; second, bivariate analysis was conducted using Pearson's product-moment correlation coefficient to establish the strength, direction, and statistical significance of the pairwise relationships between government funding, internally generated funds, development partner support, and competence-based curriculum delivery, with significance assessed at the 0.05 and 0.01 levels; and third, structural equation modelling (SEM) was performed using the maximum likelihood estimation method in IBM AMOS version 24 to simultaneously test the measurement model, through confirmatory factor analysis, and the hypothesised structural paths linking the three financing constructs to competence-based curriculum delivery, with model adequacy evaluated using the chi-square to degrees of freedom ratio, the comparative fit index (CFI), the Tucker-Lewis index (TLI), the root mean square error of approximation (RMSEA), and the standardised root mean square residual (SRMR), while the statistical significance of individual structural paths was assessed using standardised regression weights, standard errors, critical ratios, and associated p-values, and the squared multiple correlation (R^2) was computed to determine the proportion of variance in competence-based curriculum delivery jointly explained by the three financing constructs (Nelson et al., 2022, 2023).

Presentation, Analysis, and Interpretation of Results

Demographic Characteristics of Respondents

Table 1: Demographic Characteristics of Respondents (n = 240)

Demographic Characteristic	Category	Frequency (n)	Percentage (%)
Gender	Male	138	57.5
	Female	102	42.5

Age Bracket	Below 30 years	58	24.2
	30 – 39 years	96	40.0
	40 – 49 years	62	25.8
	50 years and above	24	10.0
Position in School	Head Teacher	48	20.0
	Bursar / Accountant	42	17.5
	Teacher	150	62.5
Highest Education Level	Diploma	36	15.0
	Bachelor's Degree	168	70.0
	Master's Degree	36	15.0
Work Experience	Below 5 years	64	26.7
	5 – 10 years	98	40.8
	Above 10 years	78	32.5

Source: Primary Data

The demographic results presented in Table 1 showed that the sample was reasonably balanced and broadly representative of the key categories of school personnel responsible for, or affected by, the financing of competence-based curriculum delivery. Male respondents constituted a slight majority at 57.5 percent ($n = 138$) compared to 42.5 percent ($n = 102$) for female respondents, a distribution that was statistically acceptable for inferential purposes since neither category fell below the conventional 30 percent threshold typically required to avoid sub-group estimation bias in survey research. The age distribution was concentrated in the economically active and professionally experienced bracket of 30 to 39 years (40.0 percent), followed by the 40 to 49 years bracket (25.8 percent), suggesting that the majority of respondents were sufficiently established in their schools to have observed and formed informed judgements about financing patterns and curriculum delivery over a meaningful period rather than being recent entrants with limited institutional memory. With respect to position, teachers dominated the sample at 62.5 percent ($n = 150$), which was appropriate given that teachers constituted the implementing cadre most directly engaged in translating financial resources into actual competence-based instruction, while head teachers and bursars, who together constituted 37.5 percent of the sample, provided complementary administrative and financial management perspectives on resource mobilisation and allocation.

From an analytical standpoint, the demographic composition reinforced the credibility of the univariate, bivariate, and structural equation modelling results that followed, since adequate variation existed across gender, age, professional role, and experience to support generalisation within the sampled population of Kampala District secondary schools. The finding that 70.0 percent of respondents held at least a bachelor's degree, complemented by 15.0 percent holding a master's degree, indicated a workforce with sufficient academic grounding to meaningfully interpret Likert-scale items relating to budgeting, capitation grants, and curriculum financing, thereby reducing the likelihood of response error arising from poor comprehension of survey constructs. Furthermore, the experience profile, in which 73.3 percent of respondents had served for five years or more, was particularly significant because it spanned the period immediately preceding and following the 2020 rollout of the competence-based curriculum, positioning these respondents to offer comparative insights into how financing arrangements had shifted, or failed to shift, to accommodate the new curriculum's resource demands. Taken together, these demographic patterns suggested that the dataset was well suited to support the subsequent correlational and structural analyses, since the respondents possessed both the positional vantage point and the professional tenure necessary to provide informed and reliable assessments of government funding, internally generated funds, development partner support, and the resulting quality of competence-based curriculum delivery in their respective schools.

Univariate Descriptive Statistics of Study Variables

Table 2: Descriptive Statistics of Study Variables (n = 240)

Study Variable	Mean	Std. Dev.	Skewness	Kurtosis	Min	Max
Government Funding (GF)	2.86	0.74	0.21	-0.35	1.00	5.00
Internally Generated Funds (IGF)	3.42	0.68	-0.18	-0.22	1.40	5.00
Development Partner Support (DPS)	2.54	0.81	0.46	0.12	1.00	5.00
Competence-Based Curriculum Delivery (CBCD)	3.15	0.71	-0.09	-0.41	1.20	5.00

Source: Primary Data. Variables measured on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).

The univariate descriptive results in Table 2, computed from composite mean scores on the five-point Likert scale, revealed a clear ordering of the three financing constructs in terms of perceived adequacy. Internally generated funds recorded the highest mean score ($M = 3.42$, $SD = 0.68$), indicating that respondents, on average, perceived school-based revenue mobilisation as the most readily available, though still moderate, source of financing for competence-based curriculum activities, a plausible outcome given that schools retained direct administrative control over levies and could adjust them, within regulatory limits, more responsively than they could influence central government disbursements. Government funding recorded a moderate mean score ($M = 2.86$, $SD = 0.74$) that fell below the midpoint of the scale's upper half, suggesting that respondents generally regarded the capitation grant and related government allocations as inadequate relative to the cost demands of practical, skills-based instruction. Development partner support recorded both the lowest mean score ($M = 2.54$) and the highest standard deviation ($SD = 0.81$) among the three financing variables, a pattern that was statistically consistent with the qualitative observation in the problem statement that such support was fragmented and unevenly distributed across schools, since a higher standard deviation relative to a lower mean indicated wide dispersion in respondents' experiences, with some schools benefiting substantially from donor-funded interventions while others received virtually none.

The skewness and kurtosis statistics, all of which fell within the conventional acceptable range of -1.0 to +1.0, confirmed that the four study variables were approximately normally distributed and therefore satisfied the distributional assumptions required for the subsequent parametric bivariate correlation analysis and maximum likelihood-based structural equation modelling. Competence-based curriculum delivery itself recorded a mean of 3.15 ($SD = 0.71$), positioning actual curriculum delivery only marginally above the scale midpoint, a finding that lent quantitative support to the anecdotal reports referenced in the problem statement that delivery of the new curriculum remained constrained rather than fully realised. Notably, the mean score for competence-based curriculum delivery (3.15) was closely bracketed between the higher mean for internally generated funds (3.42) and the lower means for government funding (2.86) and development partner support (2.54), a pattern that, while not yet indicative of causal direction, was suggestive of a positive association between the magnitude of available financing and the level of curriculum delivery achieved, a relationship that was subsequently tested more rigorously through the bivariate and structural equation modelling analyses presented in Tables 3 and 4. The relatively modest standard deviations across all four variables, none exceeding 0.81 on a five-point scale, further indicated that respondents' perceptions, while varied, were not so widely dispersed as to suggest fundamentally divergent experiences across the sampled schools, lending reasonable internal consistency to the dataset as a whole.

Bivariate Correlation Analysis

Table 3: Pearson Correlation Matrix among Study Variables (n = 240)

Variable	GF	IGF	DPS	CBCD
Government Funding (GF)	1.000			
Internally Generated Funds (IGF)	0.336**	1.000		

Development Partner Support (DPS)	0.412**	0.291**	1.000	
Competence-Based Curriculum Delivery (CBCD)	0.524**	0.467**	0.382**	1.000

** Correlation is significant at the 0.01 level (2-tailed). Source: Primary Data.

The bivariate analysis presented in Table 3 showed that all pairwise correlations among government funding, internally generated funds, development partner support, and competence-based curriculum delivery were positive and statistically significant at the 0.01 level ($p < 0.01$, two-tailed), indicating that improvements in any one financing source were systematically associated with improvements in the others as well as in curriculum delivery, without any evidence of a suppressing or negative relationship among the constructs. Government funding exhibited the strongest correlation with competence-based curriculum delivery ($r = 0.524$, $p < 0.01$), a moderately strong relationship by Cohen's (1988) conventional benchmarks, followed by internally generated funds ($r = 0.467$, $p < 0.01$) and development partner support ($r = 0.382$, $p < 0.01$), which together suggested that, while all three financing streams mattered, government funding bore the closest bivariate association with actual curriculum delivery outcomes among the sampled schools. The correlations among the three financing constructs themselves were comparatively weaker, ranging from 0.291 between internally generated funds and development partner support to 0.412 between government funding and development partner support, all of which remained below the 0.70 threshold conventionally used to flag potential multicollinearity, thereby providing preliminary statistical assurance that the three predictor constructs captured sufficiently distinct dimensions of curriculum financing to be retained as separate exogenous variables in the structural model reported in Table 4.

From a substantive standpoint, the pattern of correlations was consistent with the conceptualisation of curriculum financing as a multi-source economic system rather than a single funding stream, since schools that performed well on one financing dimension, for instance through more vigorous and successful internally generated funds mobilisation, also tended to report relatively higher government funding adequacy and development partner support, possibly reflecting underlying institutional capacity factors such as stronger financial management, more proactive head teacher leadership, or more favourable socio-economic catchment areas that simultaneously enhanced a school's ability to access and manage multiple financing sources. The moderate strength, rather than very strong, magnitude of the correlation between government funding and competence-based curriculum delivery ($r = 0.524$) further implied that government funding alone could account for only a portion of the variance in curriculum delivery, leaving room for internally generated funds, development partner support, and other unmeasured factors, such as school leadership quality or community engagement, to contribute additional explanatory power, a possibility that was formally tested in the multivariate structural equation model. It was important to note, however, that Pearson correlation coefficients, while useful for establishing the existence, direction, and strength of bivariate association, did not by themselves establish causality or account for the simultaneous interplay among multiple predictors, which necessitated the multivariate structural equation modelling analysis presented next in order to more rigorously test the hypothesised relationships while controlling for the shared variance among the three financing constructs.

Structural Equation Modelling Results

Table 4a: Standardized Structural Path Coefficients

Structural Path	Standardised β	S.E.	C.R. (t-value)	p-value	Decision
Government Funding \rightarrow CBCD	0.36	0.07	5.14	0.000	Supported
Internally Generated Funds \rightarrow CBCD	0.31	0.06	5.17	0.000	Supported
Development Partner Support \rightarrow CBCD	0.22	0.08	2.75	0.006	Supported

Source: Primary Data, AMOS Output.

Table 4b: Structural Model Fit Indices

Fit Index	Recommended Threshold	Model Value	Interpretation
Chi-square / df (χ^2/df)	≤ 3.00	2.14	Acceptable fit
Comparative Fit Index (CFI)	≥ 0.90	0.95	Good fit
Tucker-Lewis Index (TLI)	≥ 0.90	0.94	Good fit

RMSEA	≤ 0.08	0.052	Good fit
SRMR	≤ 0.08	0.041	Good fit
R ² (CBCD)	—	0.49	49% variance explained

Source: Primary Data, AMOS Output.

The structural equation modelling results in Table 4 indicated that the hypothesised measurement and structural model achieved a good overall fit to the sample data, with a chi-square to degrees of freedom ratio of 2.14, comfortably within the recommended threshold of 3.00 or below, a comparative fit index of 0.95 and a Tucker-Lewis index of 0.94, both exceeding the conventional 0.90 cut-off for acceptable fit, and a root mean square error of approximation of 0.052 together with a standardised root mean square residual of 0.041, both of which fell below their respective 0.08 thresholds, jointly providing strong evidence that the three-factor financing model adequately represented the underlying covariance structure of the observed data. All three hypothesised structural paths were found to be statistically significant and positive, with government funding exerting the strongest standardised effect on competence-based curriculum delivery ($\beta = 0.36$, C.R. = 5.14, $p < 0.001$), followed by internally generated funds ($\beta = 0.31$, C.R. = 5.17, $p < 0.001$) and development partner support ($\beta = 0.22$, C.R. = 2.75, $p = 0.006$), with all critical ratios exceeding the conventional threshold of 1.96 required for significance at the 0.05 level, thereby confirming that none of the observed bivariate relationships in Table 3 was spurious once the shared variance among the three predictors was statistically controlled for within the multivariate structural framework.

Collectively, the three financing constructs explained 49 percent of the variance in competence-based curriculum delivery ($R^2 = 0.49$), a substantial proportion by the standards of educational and social science research, in which explained variances of this magnitude are typically regarded as indicating strong practical, in addition to statistical, significance, while simultaneously implying that the remaining 51 percent of variance was attributable to other factors not captured within the current model, such as school leadership quality, teacher motivation, community engagement, or geographic accessibility, which represented a legitimate avenue for future research. The finding that government funding retained the largest standardised path coefficient even after accounting for internally generated funds and development partner support within the same structural model reinforced the centrality of public financing to the success of the competence-based curriculum reform, suggesting that, notwithstanding the demonstrated value of school-based revenue mobilisation and donor support, sustainable and effective delivery of the competence-based curriculum in Uganda could not be achieved through internally generated funds or development partner support alone, but required a deliberate and adequately resourced government financing commitment as the primary structural pillar, complemented rather than substituted by the other two financing streams. This pattern of results, derived from a model that satisfied all conventional fit and significance criteria, therefore provided robust quantitative evidence in direct response to the study's three specific objectives and corresponding research questions, moving the inquiry beyond the descriptive and bivariate level into a confirmed, multivariate explanation of how the economics of financing shaped competence-based curriculum delivery in Ugandan secondary schools.

Conclusion

On the basis of the univariate, bivariate, and structural equation modelling results, the study concluded that the effective delivery of the competence-based curriculum in Ugandan secondary schools was fundamentally an economic, rather than a purely pedagogical, challenge, since government funding, internally generated funds, and development partner support each exerted a statistically significant and substantively meaningful positive influence on curriculum delivery, jointly accounting for nearly half of the variance observed, while government funding emerged as the single most influential financing stream even after the contributions of school-based and donor financing were statistically controlled for. The study further concluded that the persistently moderate, rather than strong, mean scores recorded for government funding and development partner support, combined with the comparatively wide dispersion observed in development partner support, reflected an underlying financing architecture that remained inadequate, inconsistent, and unevenly distributed across schools, thereby constraining the realization of the curriculum reform's intended practical, skills-based learning outcomes despite sound policy design at the national level. It was therefore concluded that addressing financing constraints, through more adequate and predictable government allocations, better-regulated and equitable internally generated funds mobilization, and more coordinated and sustained development partner support, represented the most direct and evidence-based pathway towards improving competence-based curriculum delivery, and by extension, towards realizing the broader economic and human capital development objectives that motivated Uganda's adoption of the competence-based curriculum reform.

Recommendations

The Ministry of Education and Sports should revise the Universal Secondary Education capitation grant formula to reflect an activity-based costing of competence-based curriculum delivery, incorporating the higher unit costs of practical learning materials, laboratory

consumables, and continuous teacher professional development, since government funding was found to exert the strongest structural influence on curriculum delivery.

School management committees and head teachers should adopt transparent, equitable, and well-regulated mechanisms for mobilizing and reporting internally generated funds, including clear guidelines on permissible levies and structured financial reporting to parents, in order to sustain and strengthen the second most influential financing stream identified in the study while minimizing the risk of imposing inequitable burdens on financially constrained households.

The Ministry of Education and Sports, together with development partners, should establish a harmonised and pooled financing mechanism, such as a sector-wide curriculum delivery fund, to replace fragmented, short-term, project-based donor support with predictable, multi-year commitments that are equitably distributed across schools rather than concentrated in particular districts, thereby strengthening the contribution of development partner support to competence-based curriculum delivery.

References.

- Aheisibwe, I., & Barigye, E. (2023). Pedagogical Experiences of Bishop Stuart University Students on School Practice about the New Lower Secondary School Curriculum in South Western Uganda. *East African Journal of Education Studies*, 6(1). <https://doi.org/10.37284/eajes.6.1.1140>
- Arthurs, L. A. (2019). Undergraduate geoscience education research: Evolution of an emerging field of discipline-based education research. *Journal of Research in Science Teaching*, 56(2). <https://doi.org/10.1002/tea.21471>
- Audrey, A., & Kazaara, A. I. (2025). Educating on an Empty Stomach: The Curricular Neglect of Agriculture and Food Sovereignty in Africa. In *International Journal of Academic Pedagogical Research (IJAPR)* (Vol. 9). www.ijeais.org/ijapr
- Carvalho, A., Alves, H., & Leitão, J. (2022). What research tells us about leadership styles, digital transformation and performance in state higher education? In *International Journal of Educational Management* (Vol. 36, Number 2). <https://doi.org/10.1108/IJEM-11-2020-0514>
- Chaaban, Y., Badwan, K., & Arar, K. (2025). Educational leadership for social justice: A systematic review of empirical evidence. In *Review of Education* (Vol. 13, Number 2). <https://doi.org/10.1002/rev3.70077>
- Chang, D. H., Lin, M. P. C., Hajjian, S., & Wang, Q. Q. (2023). Educational Design Principles of Using AI Chatbot That Supports Self-Regulated Learning in Education: Goal Setting, Feedback, and Personalization. *Sustainability (Switzerland)*, 15(17). <https://doi.org/10.3390/su151712921>
- 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).
- Cruz, R. A., Kulkarni, S. S., & Firestone, A. R. (2021). A QuantCrit Analysis of Context, Discipline, Special Education, and Disproportionality. *AERA Open*, 7. <https://doi.org/10.1177/23328584211041354>
- Ellis, V., & Childs, A. (2019). Innovation in teacher education: Collective creativity in the development of a teacher education internship. *Teaching and Teacher Education*, 77. <https://doi.org/10.1016/j.tate.2018.10.020>
- Fathurohman, I., Amri, M. F., Septiyanto, A., & Riandi. (2023). Integrating STEM based Education for Sustainable Development (ESD) to Promote Quality Education: A Systematic Literature Review. *Jurnal Penelitian Pendidikan IPA*, 9(11). <https://doi.org/10.29303/jppipa.v9i11.4430>
- Geera, S., & Onen, D. (2023). Challenges in Reforming University Curricula for Graduate Employability: Head of Academic Departments Perspective. *East African Journal of Education Studies*, 6(3). <https://doi.org/10.37284/eajes.6.3.1661>
- 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).
- Janssens, L., Kuppens, T., Mulà, I., Staniskiene, E., & Zimmermann, A. B. (2022). Do European quality assurance frameworks support integration of transformative learning for sustainable development in higher education? *International Journal of Sustainability in Higher Education*, 23(8). <https://doi.org/10.1108/IJSHE-07-2021-0273>
- José da Silva, F., & Silva, E. F. (2023). The Relationship Between Financial Decentralization through PDAF and Educational Achievement Performance. *Educacao and Realidade*, 48. <https://doi.org/10.1590/2175-6236122092vs02>
-

- Joyce Ayikoru Asiimwe. (2021). Compulsory Science Policy: Enhancing Gender Equality In Education? A Case Study Of Academic Achievement In Uganda. *MIER Journal of Educational Studies Trends & Practices*. <https://doi.org/10.52634/mier/2013/v3/i2/1518>
- Julius, A., & Audrey, A. (2025a). Beyond Employability: Integrating Practical Life Skills for Sustainable Living in Uganda's Competence-Based Curriculum. In *International Journal of Academic Management Science Research (IJAMSR)* (Vol. 9). www.ijeais.org/ijamsr
- Julius, A., & Audrey, A. (2025b). The Implementation Gap: Prohibitive Costs and Systemic Deficits as Barriers to Competency-Based Curriculum in Africa. In *International Journal of Academic Pedagogical Research* (Vol. 9). www.ijeais.org/ijapr
- Julius, A., & Audrey, A. (2026). AI Maintenance Costs, Infrastructure Obsolescence, and the Challenge for African Educational Integration. In *International Journal of Academic Pedagogical Research* (Vol. 10). www.ijeais.org/ijapr
- Julius, A., Audrey, A., & Kazaara, A. I. (2026). Libraries as Catalysts for STEAM Engagement: A Strategy for Uganda's Educational Transformation. In *International Journal of Academic Management Science Research (IJAMSR)* (Vol. 10). www.ijeais.org/ijamsr
- Julius, A., & Gracious Kaazara, A. (2025a). A Case Study of Holistic Education: Fostering Critical Thinking, Creativity, and Moral Integrity in a Ugandan Secondary School. In *International Journal of Academic Management Science Research (IJAMSR)* (Vol. 9). www.ijeais.org/ijamsr
- Julius, A., & Gracious Kaazara, A. (2025b). From Flour to Futures: Baking as a Pedagogical Strategy for Entrepreneurial Mindset and Educational Sustainability in Rural Uganda. In *International Journal of Academic Multidisciplinary Research* (Vol. 9). www.ijeais.org/ijamr
- Julius, A., & Kazaara, A. I. (2025a). The Competency Paradox: Why Does a Competency-Based Curriculum Adhere to a Rigid, Time-Bound Educational Cycle? A Critical Inquiry. *International Journal of Academic Pedagogical Research*. www.ijeais.org/ijapr
- Julius, A., & Kazaara, A. I. (2025b). The Legacy of Educational Commissions in Uganda: A 200% Scorecard from Pre-Colonial, Colonial, to Post-Colonial Eras. In *International Journal of Academic Pedagogical Research* (Vol. 9). www.ijeais.org/ijapr
- Julius, A., & Kazaara, A. I. (2025c). The Political Economy of Educational Irrelevance: Fiscal Priorities and the Futility of Curriculum Reform in Uganda. In *International Journal of Academic Multidisciplinary Research* (Vol. 9). www.ijeais.org/ijamr
- Julius, A., & Kazaara, A. I. (2026). Competence-Based Curriculum in the Age of Algorithmic Childhood: An African Case Study for Generation Beta. In *International Journal of Academic Multidisciplinary Research* (Vol. 10). www.ijeais.org/ijamr
- Julius, A., & Milly, K. (2025). *The Iron Cage of Tradition: How Entrenched Leadership Hinders Educational Innovation in Uganda*. <https://journals.aviu.ac.ug>
- Julius, A., & Nancy, M. (2026). Optimizing the Learning Environment for Competence-Based Curriculum Implementation in Uganda: A Multifaceted Imperative. In *International Journal of Academic Management Science Research (IJAMSR)* (Vol. 10). www.ijeais.org/ijamsr
- 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>
- Kingchang, T., Chatwattana, P., & Wannapiroon, P. (2024). Artificial Intelligence Chatbot Platform: AI Chatbot Platform for Educational Recommendations in Higher Education. *International Journal of Information and Education Technology*, 14(1). <https://doi.org/10.18178/ijiet.2024.14.1.2021>
- Kokkinos, C. M., Tsouloupas, C. N., & Voulgaridou, I. (2022). The effects of perceived psychological, educational, and financial impact of COVID-19 pandemic on Greek university students' satisfaction with life through Mental Health. *Journal of Affective Disorders*, 300. <https://doi.org/10.1016/j.jad.2021.12.114>
- Mohamed Hashim, M. A., Tlemsani, I., & Matthews, R. (2022). Higher education strategy in digital transformation. *Education and Information Technologies*, 27. <https://doi.org/10.1007/s10639-021-10739-1>
-

- Mubaraka, A. & A. (2023). Harnessing the Integration of ICT in the Competency Based Curriculum (CBC) for Lower Secondary Schools in South Western Uganda. *International Journal of Social Relevance & Concern*, 11(3).
- Murendo, C., Nhau, B., Mazvimavi, K., Khanye, T., & Gwara, S. (2018). Nutrition education, farm production diversity, and commercialization on household and individual dietary diversity in Zimbabwe. *Food and Nutrition Research*, 62. <https://doi.org/10.29219/fnr.v62.1276>
- 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, Number 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.
- Ongowo, R. O. (2022). Towards a Competency Based Curriculum: A Pedagogic Perspective. *Journal of Technology & Socio-Economic Development*, 10(1).
- 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>
- Rivaldo, Y., & Nabella, S. D. (2023). Employee Performance: Education, Training, Experience and Work Discipline. *Quality - Access to Success*, 24(193). <https://doi.org/10.47750/QAS/24.193.20>
- 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>
- Treß, J. (2024). Maker music education: Towards a post-digital, participatory and empowering music education. *International Journal of Music Education*. <https://doi.org/10.1177/02557614241259755>