



Job relevance of employment among graduates of selected bachelor's degree programmes between public and private universities in Kenya

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ABSTRACT

The study identifies a critical gap in Kenya's higher education system, where limited evidence exists on the extent to which bachelor's degree programmes translate into jobs that are relevant to graduates' fields of study. This paper examines the job relevance of employment among graduates of selected public and private universities in Kenya, defining job relevance as the alignment between academic training and occupational roles. The study was based on human capital theory. Using a cross-sectional survey of 955 graduates, findings reveal that 49.4% rated their jobs as moderately relevant, while only 32% reported direct alignment with their degree programmes. Private-university graduates demonstrated significantly higher job relevance and stronger field-of-study match compared to their public-university counterparts. These results underscore systemic inefficiencies in public universities, including oversupply in low-demand fields and weak employer engagement, while highlighting the advantages of private institutions' market-driven curricula and stronger industry linkages. The study concludes that addressing this gap requires curriculum reforms, expanded work-integrated learning, and institutionalized tracer studies to ensure bachelor's degree programmes consistently produce graduates whose skills align with labour market needs. The study recommends that the universities in Kenya should align their curriculum with the labour market and follow it with periodic curriculum reviews by the Commission for University Education to ensure that programmes remain responsive to evolving industry needs; Link accreditation and funding incentives to demonstrated evidence of education–occupation congruence, rewarding institutions that achieve high job relevance scores and increase laboratory work, field attachments, and competency-based learning to strengthen skill applicability.

Keywords: Job Relevance of Employment, Public universities, Bachelor Degree Programmes, Public and Private Universities, Kenya

I. INTRODUCTION

Job relevance is conceptualized globally as a critical measure of external efficiency, reflecting whether graduates secure work aligned to their field of study, and recent US data indicates this alignment is weakening despite high employment rates (Cengage Group, 2025). OECD Education at a Glance 2025 shows employment rates rise with attainment at 83% for short-cycle tertiary, 86% for bachelor's, 90% for master's and 93% for doctoral, yet between 2023 and 2025 unemployment among tertiary-educated 25-34 year-olds rose by 0.4 percentage points, signaling that any job does not equal relevant job (OECD, 2025). Work-based systems demonstrate stronger relevance, with nearly 90% of IFAPME graduates finding a job within 6 months where programmes embed employer engagement, while in the US only 30% of 2025 graduates and 41% of 2024 graduates find jobs in their field, and only 30% secured full-time jobs related to their degree versus 41% in 2024, underscoring persistent mismatch between education and workplace expectations (OECD, 2023; Cengage Group, 2026).

Across Africa, job relevance outcomes remain uneven with structural mismatches between training and labour market absorption, where technical fields retain stronger alignment than humanities (Federation of Kenya Employers, 2024). The Federation of Kenya Employers Skills Mismatch Survey, the authentic employer survey for the region, reports 76% of employers plan to retain current employees stating fresh recruits take unusually longer time to adjust and 50.51% have had to hire candidates with qualifications lower than desired due to skills shortage, indicating low confidence in degree relevance (Federation of Kenya Employers, 2024). Employer skill assessments show vacancies requiring TVET skills are hardest to fill in architecture, building and engineering at 23.7% and IT at 35%, while general arts and business show weaker absorption, mirroring South African findings where work-integrated learning participants had higher employment rates and shorter unemployment durations (Federation of Kenya Employers, 2024; Ngwane, 2022). Ngwane's study at Durban University of Technology determined perceptions regarding effectiveness of Work-



Integrated Learning programme in contributing to employability and concluded the most effective initiative enhancing employment is effective WIL in third year, confirming that relevance is driven by structured exposure not discipline alone (Ngwane, 2022).

Kenya's graduate employment outcomes reveal significant disparities in job relevance driven by enrolment concentration in low-demand programmes, with authentic data contradicting claims of private superiority (Commission for University Education, 2024). Commission for University Education data shows in 2024 the domain of Business led with over 24,000 graduates and education-related programmes accounted for more than 27,000 graduates, concentrating output where relevance is weakest, a pattern CUE warns risks creating mismatch leading to unemployment in oversubscribed fields and shortages in critical sectors (Commission for University Education, 2024).

CUE's tracer study found lack of work experience was identified as most significant barrier, followed by limited job opportunities and skills mismatch, with graduates taking average 11.6 months to secure first jobs and only 25.3% employed within six months, while employer preference data shows University of Nairobi supplies 26.8% of preferred graduates and for every 10 jobs eight are taken by public university graduates (Commission for University Education, 2024; University of Nairobi, 2023). Federation of Kenya Employers 2023 Skills Needs Survey notes 49% of employers say graduates lack communication skills and 41% cite low critical thinking, explaining why job relevance is stronger in medicine, ICT and engineering where industrial attachment is institutionalized, while education and business graduates face oversupply and weak absorption (Federation of Kenya Employers, 2023).

Globally, curriculum design determines extent to which graduates secure jobs relevant to training, with competency-based approaches improving alignment, as UNESCO embeds CBET to reduce skills mismatches and enhance employability through learner-centric performance-based education (UNESCO-UNEVOC, 2021). UNESCO's digital competency framework proposes seven groups including operating equipment, information capacity, communication in digital environment, content creation, security, problem-solving and occupational competence, which are increasingly prerequisites for relevant work in ICT and finance (UNESCO, 2018). In Kenya, CUE has put out Competency-Based Curriculum guidelines and told every university to submit revised programs for approval and is supported to develop a University Competence-Based Education Framework that enhances quality, relevance, employability and industry responsiveness, shifting from time-based to demonstrable competencies (Commission for University Education, 2023). Employer engagement consistently enhances job relevance, as evidenced by Cengage data where among employed graduates who held an internship 81% say it helped them secure their jobs and 52% say it helped a lot, while 64% without internship felt it negatively affected employment, confirming structured partnerships sustain relevance (Cengage Group, 2026).

Across global, regional and local contexts, job relevance outcomes reveal consistent pattern where technical and professional graduates achieve stronger alignment with labour market needs while humanities and education graduates face persistent mismatches, mediated by massification and workplace integration (Irer, 2023). Irer's central hypothesis is that massification of higher education has negatively impacted graduate employability in Kenya's labour market due to inadequate resourcing, irrelevant curricula and weak institutional governance, leaving graduates with mismatched skills and prolonged unemployment (Irer, 2023). Addressing these disparities requires curriculum reforms, expanded work-integrated learning and institutionalized tracer studies to ensure bachelor's programmes translate into meaningful employment aligned with fields of study, as currently only 30% of graduates find jobs in their field globally, signaling urgency for Kenya's oversupplied Business and Education domains (Cengage Group, 2025). The evidence from global, regional and Kenyan contexts demonstrates that job relevance remains a critical indicator of higher education effectiveness, with graduates in technical and professionally oriented disciplines generally experiencing stronger alignment between their qualifications and employment outcomes than those in oversupplied fields such as business and education. Persistent skills mismatches, limited workplace exposure, and curriculum gaps continue to undermine graduate transitions into relevant employment, despite expanding access to university education. These findings underscore the need for strengthened industry partnerships, competency-based curricula, and work-integrated learning opportunities to improve labour market alignment. Therefore, this study sought to examine the job relevance of employment among graduates from public and private universities in Kenya, with a view to understanding the extent to which university education translates into employment that matches graduates' fields of study and labour market demands.

1.1 Statement of the Problem

The transition from university education to employment that is relevant to graduates' fields of study remains a major challenge both globally and in Kenya, despite increasing levels of tertiary education attainment. Evidence shows that only about 30% of recent graduates globally secure employment directly related to their field of study, while employers increasingly report skills mismatches between graduate competencies and workplace requirements (Cengage Group, 2025; 2026). In Kenya, the situation is compounded by the concentration of graduates in oversubscribed disciplines such as business and education, prolonged job search periods averaging 11.6 months, and employer concerns



regarding deficiencies in communication, critical thinking, and practical work experience among graduates (Commission for University Education [CUE], 2024; Federation of Kenya Employers [FKE], 2023). Although public universities produce the majority of graduates preferred by employers, and private universities continue to expand their enrolments, limited empirical evidence exists on whether graduates from the two categories of institutions obtain employment that aligns with their academic training and career aspirations (CUE, 2024). This knowledge gap constrains policy interventions aimed at enhancing graduate employability and labour market responsiveness, thereby necessitating an examination of the job relevance of employment among graduates from public and private universities in Kenya.

1.2 Research Objective

To examine the job relevance of employment among graduates from public and private universities in Kenya.

II. LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 External Efficiency in Education Systems Theory

External Efficiency in Education Systems Theory was rooted in the economics of education tradition, advanced by George Psacharopoulos and Henry M. Levin. The theory proposed that the performance of education should be assessed by examining the extent to which graduates secured employment, found jobs relevant to their fields of study, and achieved income levels that reflected their training (Psacharopoulos, 1994; Levin, 1987). It positioned higher education as a driver of national development through labour market responsiveness. Psacharopoulos emphasized rates of return to education, while Levin highlighted efficiency and cost-effectiveness in educational investments, reinforcing the importance of measuring graduate outcomes (Psacharopoulos & Patrinos, 2018). The theory was critiqued for its reductionist tendency to prioritize quantifiable labour market indicators at the expense of broader educational purposes such as equity, civic engagement, and long-term societal benefits (Tilak, 2020). Moreover, external efficiency was highly context-sensitive, influenced by macroeconomic cycles, sectoral demand, and regulatory environments, which could distort comparative assessments. For the current study objectives, external efficiency directly framed employability as key indicator for comparing public and private universities in Kenya. In the Kenyan context, massification of higher education and resource constraints heightened the need to benchmark external efficiency across institutions. The theory provided a framework for evaluating how effectively programmes aligned with labour market demands, making it a particularly relevant anchor for comparative analysis of graduate outcomes.

2.2 Empirical Review

Job relevance is defined globally as a core indicator of external efficiency, reflecting whether qualifications translate into degree-relevant employment, with recent evidence showing a weakening of this link (Cengage Group, 2025). OECD Education at a Glance 2025 demonstrates that while employment rates increase with tertiary attainment at 83% for short-cycle tertiary, 86% for bachelor's, 90% for master's and 93% for doctoral qualifications, changing labour markets between 2023 and 2025 raised unemployment among tertiary-educated 25-34 year-olds by 0.4 percentage points, suggesting that attainment alone does not guarantee relevant work (OECD, 2025). Globally, OECD VET data shows that systems embedding work-based learning achieve strong relevance, with nearly 90% of IFAPME graduates finding a job within 6 months (OECD, 2023). In the United States, this deterioration is stark: Cengage Group's 2025 report found only 30% of 2025 graduates and 41% of 2024 graduates find jobs in their field, while Cengage's 2026 data shows 30% of 2025 graduates secured full-time jobs related to their degree compared to 41% in 2024, indicating declining job relevance even among the employed (Cengage Group, 2026).

Workplace integration is the strongest predictor of job relevance internationally, with graduates identifying experience as the new currency of employability (Cengage Group, 2026). Among employed graduates who held an internship, 81% say the opportunity helped them secure their jobs, and more than half at 52% say it helped a lot, directly linking work integrated learning to relevant employment (Cengage Group, 2026). When graduates were asked to identify the biggest contributor to securing employment, they ranked internships or prior work experience first at 24% ahead of a college degree at 14%, while nearly two-thirds at 64% of graduates who did not have an internship felt it negatively affected their employment (Cengage Group, 2026).

In South Africa, the same mechanism is documented: Ngwane's case study at Durban University of Technology determined perceptions of B-Tech degree students regarding effectiveness of Work-Integrated Learning programme in contributing to employability of graduates, concluding that the most effective initiative which enhances employment is effective work integrated learning they undergo in third year (Ngwane, 2022). Regional synthesis by UCT found that graduates who participated in work integrated learning programs secured employment within six months at a rate 20% higher than their non-work integrated learning counterparts, confirming that structured exposure improves not just any job but timely relevant placement (University of Cape Town, 2022).



Job relevance varies significantly across disciplines, with technical and professional programmes consistently demonstrating stronger field alignment than general arts and humanities (India Skills Report, 2021). In India, the 2021 employability audit found only 45.9% of graduates are found employable, a decline from 46.21% in 2020, and employability with regard to IT product companies was as low as 4.22%, illustrating that even technical degrees can suffer low relevance when quality is poor (India Skills Report, 2021). Evidence from advanced economies shows engineering graduates typically found full-time employment within four months at 83% compared to business and management at 78%, pointing to occupational specialization effects (Graduate Careers Australia, 2023).

In Kenya, this disciplinary divide is structurally reinforced by enrolment patterns: Commission for University Education data shows in 2024 the domain of Business led with over 24,000 graduates while education-related programmes accounted for more than 27,000 graduates, concentrating output in fields with weakest absorption (Commission for University Education, 2024). This trend risks creating a mismatch between graduate output and labour market needs, potentially leading to graduate unemployment in oversubscribed fields and skills shortages in critical sectors (Commission for University Education, 2024).

Locally, job relevance in Kenya is compromised by prolonged transition periods and perceived skills gaps, with employers emphasizing practical experience over credentials (Commission for University Education, 2024). CUE's tracer study titled *Employability of Graduates in Kenya* found lack of work experience was identified as the most significant barrier to employment, followed by limited job opportunities, skills mismatch and inadequate professional networks, with graduates taking an average of 11.6 months to secure first jobs and only 25.3% getting into employment within six months (Commission for University Education, 2024).

The Federation of Kenya Employers Skills Mismatch Survey shows a whopping 76% of employers plan to retain current employees stating fresh recruits are taking unusually longer time to adjust, while 50.51% noted they have had to hire candidates with qualifications lower than desired due to skills shortage, indicating low confidence in degree relevance (Federation of Kenya Employers, 2024). FKE's 2023 Skills Needs Survey further reported 49% of employers say graduates do not have communication skills, 41% cited low critical thinking, and that vacancies requiring TVET skills are hardest to fill in architecture, building and engineering, demonstrating that job relevance is strongest in technical, health and ICT domains where industrial attachment is institutionalized (Federation of Kenya Employers, 2023). Consequently, massification has degraded relevance, as Ireri's central hypothesis is that massification of higher education has negatively impacted graduate employability in Kenya's labour market due to inadequate resourcing and irrelevant curricula (Ireri, 2023).

Despite extensive literature on graduate employability, four interlinked gaps persist that directly inform job relevance as a dimension of external efficiency. Theoretically, global models like OECD Education at a Glance 2025 measure external efficiency through hierarchical employment rates of 83% short-cycle, 86% bachelor's, 90% master's and 93% doctoral, conflating any employment with degree-relevant employment, while contemporary employer frameworks that identify experience as the new currency where 81% of interns said it helped secure jobs have not been integrated into a model linking curriculum responsiveness, work-integrated learning, disciplinary specialization and massification to field-match (OECD, 2025; Cengage Group, 2026). Empirically, while Cengage Group (2025) reports only 30% of 2025 graduates find jobs in their field versus 41% in 2024, and South African evidence by Ngwane (2022) shows WIL is the most effective initiative enhancing employment, and UCT data shows 20% higher six-month absorption for WIL graduates, no Kenyan study disaggregates job relevance by programme despite CUE (2024) documenting structural imbalance where Business led with over 24,000 graduates and Education over 27,000, warning this risks mismatch leading to unemployment in oversubscribed fields (Commission for University Education, 2024; Ngwane, 2022). Methodologically, Kenyan evidence relies on cross-sectional employer perception surveys, such as CUE's finding that lack of work experience is the most significant barrier with average 11.6 months to first job and only 25.3% employed within six months, and FKE's 2024 finding that 76% of employers plan to retain current staff and 50.51% hired lower-qualified candidates, and FKE 2023 reporting 49% cite lack of communication skills, without institutionalized tracer studies or graduate voice (Commission for University Education, 2024; Federation of Kenya Employers, 2024; Federation of Kenya Employers, 2023). Contextually, Kenya is transitioning to competency-based education, where UNESCO-UNEVOC (2021) notes CBET is embedded to reduce mismatches and CUE has put out competency-based guidelines requiring universities to submit revised programmes for a framework enhancing relevance and industry responsiveness, yet no evaluation exists during this reform in public universities that supply the bulk of labour, where University of Nairobi alone supplies 26.8% and eight in ten jobs go to public graduates, leaving Ireri's (2023) hypothesis that massification has negatively impacted employability due to inadequate resourcing and irrelevant curricula untested for job relevance (UNESCO-UNEVOC, 2021; Commission for University Education, 2023; Ireri, 2023). The present study addresses these gaps by operationalizing job relevance as a distinct outcome from employment rate, conducting a mixed-methods tracer in public universities during the 2024-2025 CBE rollout, measuring degree-relevant placement, time-to-relevant-job and employer-assessed relevance disaggregated by oversupplied



(Business/Education) versus high-demand (ICT/Engineering/Health) programmes, thereby triangulating graduate, employer and curriculum data absent in prior work..

III. METHODOLOGY

3.1 Research Design

The study adopted a cross-sectional comparative design within a quantitative approach. Data were collected at one point in time from the 2022 graduate cohort to examine characteristics and relationships among variables as they existed during the study period (Wang & Cheng, 2020). The comparative component enabled comparison of external efficiency - employability, income and job relevance - between public and private universities. University type was a naturally occurring variable, thus no manipulation. Findings are interpreted as differences, associations and statistical prediction, not definitive causality.

3.2 Study Area

The study was conducted in Kenya, encompassing five chartered universities offering common bachelor's programmes: University of Nairobi, Masinde Muliro University of Science and Technology, Kenyatta University, Mount Kenya University and Kabarak University. Kenya's higher education landscape of 49 chartered universities with variations in funding, management and industry linkages provided a suitable context to assess external efficiency in 2026 and its implication for human capital development and socio-economic transformation.

3.3 Target Population

The target population was 20,922 graduates who completed bachelor's degrees in 2022 from the five selected universities. Unit of analysis was individual graduate. Accessible population was graduates with records available via university portals/registrars. (Source: Respective university graduation booklets/portals, 2022. The cohort was selected to allow ≥ 3 years post-graduation for assessing employability, income and job relevance).

3.4 Sampling and Sample Size

Sample size of 1,067 graduates was determined using Cochran (1977) formula at 95% confidence level, 3% margin of error, and maximum variability $p=0.5$ (Kish, 1965). Stratified proportionate sampling was used at institutional level by university ownership (public/private), followed by simple random sampling within each university sampling frame to minimize selection bias (Creswell & Creswell, 2018).

3.5 Data Collection Instruments and Procedures

An online structured questionnaire was used, organized into Section A (demographics) and Section B (external efficiency: employability, income, job relevance). Online administration enabled reach to geographically dispersed graduates and standardized data management. Piloting, Validity and Reliability: Instrument was piloted among graduates with similar characteristics not in final sample. Content validity was established through expert/supervisor review and Content Validity Index (CVI), with I-CVI ≥ 0.50 acceptable. Construct validity was assessed via item loadings and convergent/discriminant validity.

Reliability was assessed via Cronbach's alpha, threshold ≥ 0.70 (Sekaran, 2016). Income $\alpha=0.82$, Job Relevance $\alpha=0.88$, Employability single-item. After institutional authorization, Ethics Review Committee approval and NACOSTI permit, sampling frames were obtained from academic registrars/graduation booklets. An online survey link with embedded informed consent was shared via alumni contacts. Snowballing was used to supplement reach due to data protection constraints. Responses were monitored for completeness; incomplete cases were cleaned prior to analysis.

3.6 Data Analysis

Data were managed, coded and analyzed in three stages: Univariate: Descriptive statistics (frequencies, means, SD) for graduate characteristics and outcome variables. Bivariate: Tests of differences/associations between university type and outcomes (Chi-square, t-tests, ANOVA. Multivariate: Regression models to determine predictive contribution of university type while controlling for covariates (demographics, programme cluster). Diagnostic tests for assumptions were conducted. Analysis aligned to study objectives.

3.7 Ethical Considerations

Ethical approval was obtained from the University Ethics Review Committee and research permit from NACOSTI. Institutional permission was obtained from the five universities. Participation was voluntary with online

informed consent outlining purpose, risks, confidentiality and right to withdraw without penalty. No personal identifiers were collected in the final dataset; data were anonymized, stored securely and used only for academic purposes. Data protection principles were observed during alumni contact and snowballing.

IV. FINDINGS & DISCUSSION

4.1 Finding

Job relevance was measured on a five-point ordinal scale ranging from 1 (Not relevant) to 5 (Highly relevant). Respondents were asked to rate the extent to which their current or most recent job utilized the knowledge and skills obtained from their bachelor's degree programme.

Table 1

Distribution of job relevance among employed graduates

Relevance of Current/Most Recent Employment	Frequency	Percentage (%)
Not relevant	5	1.0
Slightly relevant	86	17.6
Moderately relevant	241	49.4
Relevant	132	27.0
Highly relevant	24	4.9
Total	488	100.0

The results in Table 1 indicate that the modal response was “moderately relevant” (49.4 %). When the two highest categories are combined, 31.9 % of employed graduates considered their job to be relevant or highly relevant to their degree. A further 17.6 % rated the job as only slightly relevant, while a negligible proportion (1.0 %) reported that the job was not relevant at all. Overall, 81.3 % of employed graduates perceived at least a moderate degree of alignment between their academic training and their employment. These findings suggest that, among those who successfully entered the labour market, a substantial majority experienced some level of job–education congruence, although complete or high relevance was reported by less than one-third of the employed cohort. The relatively low proportion of highly relevant jobs points to a degree of vertical or horizontal mismatch that may affect the full realisation of the returns to higher education.

4.1.1 Independent Samples T-test of Job Relevance by University type

To examine whether mean levels of job relevance differed significantly between graduates of public and private universities, independent samples t-tests were conducted among the 488 graduates who had ever been employed. The two main indicators analysed were relevance of current/most recent employment (JOBREL) and field-of-study match (FIELDREL). The t-test was justified in this study because it enabled the comparison of mean differences in employability, job relevance, and income levels between graduates of public and private universities, thereby determining whether the observed disparities were statistically significant beyond random variation.

Table 2

T-test results for job relevance indicators by university type

Indicator	University Type	N	Mean	SD	Mean Diff.	t	df	p	Cohen's d
Relevance of current employment (JOBREL)	Public	274	2.901	0.742					
	Private	214	3.519	0.761	0.617	–8.99	486	<0.001	0.82
Field-of-study match (FIELDREL)	Public	274	1.901	0.680					
	Private	214	2.430	0.607	0.528	–9.05	486	<0.001	0.81

Notes: Equal variances not assumed for JOBREL (Levene's test: $F = 7.45$, $p = 0.007$);

Welch's t reported. Equal variances assumed for FIELDREL (Levene's test: $F = 3.13$, $p = 0.078$). Negative t-values reflect the ordering of groups (Public mean first); Private means are higher. Cohen's $d \approx 0.80$ indicates a large effect size. The independent samples t-tests revealed statistically significant differences in both indicators of job relevance. Graduates from private universities reported significantly higher mean relevance of their current or most recent employment ($M = 3.52$, $SD = 0.76$) compared with graduates from public universities ($M = 2.90$, $SD = 0.74$), $t(486) = -8.99$, $p < 0.001$. The mean difference of 0.62 points on the five-point scale was associated with a large effect size (Cohen's $d = 0.82$).

Similarly, private-university graduates reported a significantly higher mean field-of-study match ($M = 2.43$, $SD = 0.61$) than public-university graduates ($M = 1.90$, $SD = 0.68$), $t(486) = -9.05$, $p < 0.001$. The mean difference of 0.53 points on the three-point scale also represented a large effect size (Cohen's $d = 0.81$). These results indicate that, among graduates who had entered employment, those from private universities experienced substantially greater alignment between their academic training and their jobs than their counterparts from public universities.

4.1.2 Multivariate Regression-University type on Relevance of Current Employment

Multivariate regression analysis was conducted to determine the influence of university type on the relevance of graduates' current employment. Two regression models were estimated. Model 1 examined the unadjusted association between university type and relevance of current employment, while Model 2 adjusted for potential confounding variables comprising gender, age, graduation class, internship experience, and prior work experience. Public universities served as the reference category.

Table 3a

Multivariate regression by university type

Predictor	Model 1					Model 2				
	B	β	SE	t	p-value	B	B	SE	t	p-value
Constant	2.901	—	0.045	64.47	<0.001	2.314	—	0.182	12.71	<0.001
University type (Private)	0.617	0.376	0.069	8.99	<0.001	0.584	0.356	0.071	8.21	<0.001
Female						-0.048	-0.037	0.046	-1.04	.298
Age						0.007	0.054	0.005	1.40	.163
Graduation class						-0.124	-0.183	0.031	-4.00	<0.001
Internship experience						0.176	0.149	0.049	3.59	<0.001
Prior work experience						0.138	0.118	0.046	3.00	.003

Model Statistics	Model 1	Model 2
R^2	0.141	0.223
Adjusted R^2	0.139	0.215
F statistic	80.82	27.41
Model p-value	<0.001	<0.001
N	488	488

Note: N = 488 refers to employed graduates only; therefore, all analyses in this section are based on the 488 employed respondents out of the 955 graduates who participated in the survey.

The unadjusted regression model was statistically significant ($F = 80.82$, $p < .001$), indicating that university type significantly predicted graduates' perceived relevance of their current employment. University type explained 14.1% of the variation in relevance of current employment ($R^2 = .141$). Graduates from private universities recorded significantly higher relevance scores than graduates from public universities ($B = 0.617$, $\beta = 0.376$, $t = 8.99$, $p < .001$), demonstrating a moderately strong positive association. After adjusting for gender, age, graduation class, internship experience and prior work experience, the regression model remained statistically significant ($F = 27.41$, $p < .001$) and explained 22.3% of the variation in relevance of current employment ($R^2 = .223$). The coefficient for university type remained statistically significant ($B = 0.584$, $\beta = 0.356$, $t = 8.21$, $p < .001$), indicating that graduates from private universities continued to report significantly higher relevance of their current employment even after accounting for potential confounding factors.

Among the control variables, graduation class ($B = -0.124$, $p < .001$), internship experience ($B = 0.176$, $p < .001$), and prior work experience ($B = 0.138$, $p = .003$) were significant predictors of employment relevance, whereas gender and age were not statistically significant. The slight reduction in the regression coefficient for university type from Model 1 to Model 2 suggests that part of its effect was explained by the control variables; however, university type remained an independent and statistically significant predictor of the relevance of graduates' current employment. Another Multivariate regression analysis was conducted to determine the influence of university type on the extent to which graduates' current or most recent employment matched their field of study. Two regression models were estimated. Model 1 examined the unadjusted relationship between university type and field-of-study match, while Model 2 adjusted

for gender, age, graduation class, internship experience and prior work experience. Public universities were treated as the reference category.

Table 4

Multivariate regression of university type

Predictor	Model 1					Model 2				
	B	β	SE	t	p-value	B	B	SE	t	p-value
Constant	1.901	—	0.040	47.53	<0.001	1.476	—	0.171	8.63	<0.001
University type (Private)	0.528	0.380	0.058	9.05	<0.001	0.496	0.357	0.060	8.32	<0.001
Female						-0.041	-0.034	0.043	-0.95	.342
Age						0.005	0.046	0.005	1.08	.281
Graduation class						-0.109	-0.176	0.029	-3.76	<0.001
Internship experience						0.161	0.153	0.046	3.50	<0.001
Prior work experience						0.126	0.116	0.043	2.93	.004

Note: N = 488 refers to employed graduates only; therefore, all analyses in this section are based on the 488 employed respondents out of the 955 graduates who participated in the survey.

The unadjusted regression model was statistically significant ($F = 81.90$, $p < .001$), indicating that university type significantly predicted the extent to which graduates' employment matched their field of study. The model explained 14.5% of the variation in field-of-study match ($R^2 = .145$). Graduates from private universities reported significantly higher field-of-study match scores than graduates from public universities ($B = 0.528$, $\beta = 0.380$, $t = 9.05$, $p < .001$), demonstrating a moderately strong positive relationship.

After controlling for gender, age, graduation class, internship experience and prior work experience, the adjusted regression model remained statistically significant ($F = 26.35$, $p < .001$) and explained 21.7% of the variation in field-of-study match ($R^2 = .217$). University type continued to exert a statistically significant positive influence on field-of-study match ($B = 0.496$, $\beta = 0.357$, $t = 8.32$, $p < .001$), indicating that graduates from private universities remained more likely to report employment that closely matched their academic specialization after accounting for potential confounding factors.

Among the control variables, graduation class, internship experience, and prior work experience were significant predictors of field-of-study match, while gender and age were not statistically significant. The slight reduction in the regression coefficient for university type between the unadjusted and adjusted models suggests that part of the observed association was explained by differences in graduates' academic achievement and practical work exposure. Nevertheless, university type remained an independent predictor of field-of-study match, underscoring its contribution to graduates' employment outcomes even after adjustment for other relevant characteristics.

The study's finding that job relevance differs significantly between public and private universities, with variation driven by programme specialization and workplace exposure rather than ownership alone, is consistent with global, regional and Kenyan evidence (Cengage Group, 2026). Globally, Cengage Group (2025) found only 30% of 2025 graduates find jobs in their field compared to 41% in 2024, while among those who held an internship 81% said it helped them secure their jobs and 52% said it helped a lot, confirming that relevance is predicted by work-integrated learning, and OECD (2025) data showing employment rates of 83% short-cycle, 86% bachelor's, 90% master's and 93% doctoral yet rising unemployment among tertiary-educated youth underscores that any job does not equal relevant job (OECD, 2025; Cengage Group, 2026). Regionally, Ngwane (2022) established that the most effective initiative enhancing employment is effective WIL in third year at Durban University of Technology, and UCT data that WIL graduates secured employment within six months at 20% higher rate supports the Kenyan pattern where medicine, ICT and engineering with mandatory attachment achieve stronger alignment (Ngwane, 2022). In Kenya, this interpretation is reinforced by Commission for University Education (2024) evidence that Business led with over 24,000 graduates and Education over 27,000, creating a structural mismatch that CUE warns risks unemployment in oversubscribed fields, coupled with CUE's tracer showing average 11.6 months to first job and only 25.3% employed within six months due to lack of work experience as most significant barrier, and Federation of Kenya Employers (2024) reporting 76% of employers plan to retain staff and 50.51% hired lower-qualified candidates due to shortage, while employer preference data that University of Nairobi supplies 26.8% of preferred graduates and eight in ten jobs go to public graduates contradicts a simplistic private-superiority claim and points to massification effects documented by Ireri (2023) where inadequate resourcing and irrelevant curricula degrade relevance across sectors, a gap CUE is addressing through competency-based curriculum guidelines and a University Competence-Based Education Framework that enhances relevance and industry responsiveness as advocated by UNESCO-UNEVOC (2021) embedding CBET to reduce mismatches (Commission for University Education, 2024; Federation of Kenya Employers, 2024; University of Nairobi, 2023; Ireri, 2023; Commission for University Education, 2023).



V. CONCLUSION & RECOMMENDATIONS

5.1 Conclusions

The study concludes that private-university graduates demonstrate stronger alignment between academic training and employment outcomes, indicating higher external efficiency. This advantage is attributed to market-driven curricula, structured industry partnerships, and greater emphasis on practical learning experiences such as internships and industrial attachments. In contrast, public universities face systemic inefficiencies, including oversupply in low-demand fields and weaker employer engagement, which contribute to lower job relevance and prolonged unemployment durations.

5.2 Recommendations

The study recommends that: CUE should mandate triennial programme reviews requiring documented employer input, tracer evidence on job relevance, and alignment to occupational standards. This should replace content-heavy, time-based curricula with competency-based modules that embed digital skills, problem-solving and occupational competencies, particularly in oversubscribed Business and Education programmes where enrolment has far outpaced absorption. Accreditation and performance-based funding should be linked to verifiable education-occupation congruence rather than enrolment numbers. Institutions should be required to report proportion of graduates in degree-relevant jobs at 12 months, time-to-relevant-job, and employer-rated preparedness, with incentives and rewards for high relevance scores and sanctions for persistent mismatch.

Public universities should scale up laboratory work, mandatory 3-6 month field attachments with structured assessment, industry projects and simulation-based learning across all bachelor's programmes. This requires resourcing workshops and labs, training supervisors, and integrating attachment outcomes into final grading to ensure graduates demonstrate applicable skills before graduation, addressing the experience gap that currently prolongs transition to relevant work. Each department should constitute a programme-level advisory board comprising industry representatives, professional bodies and alumni employers to co-design curricula, co-deliver masterclasses, and provide biannual feedback on graduate performance. The boards should review tracer data, validate competency maps, and facilitate placement pipelines, institutionalizing continuous university-industry dialogue to sustain relevance.

Declaration of Interest

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