

Influence of Infrastructure Adequacy on the Preparedness of Curriculum Implementation of CBET in Public Technical Institutions in Mt. Kenya East Region, Kenya

Caroline Kananu Ringeera^{1*}, Flora Gacheri Ngeera², Sabria Murithi³

¹²³Kenya Methodist University, Kenya

Corresponding author email: mugunakarol@gmail.com

Accepted: 16 August 2025 || Published: 29 August 2025

Abstract

Adequate infrastructure is essential for supporting curriculum implementation of Competency-Based Education and Training (CBET). Despite government funding, structured guidance for dedicated financial support regarding infrastructure for CBET, its execution in Technical and Vocational Education and Training (TVET) is conspicuously haphazard. This study examined infrastructure adequacy on preparedness for CBET curriculum implementation in Kenyan TVET institutions. Grounded in system theory and employing a mixed-methods exploratory design, the study targeted 70,591 individuals across 21 principals, 21 Board of Governors chairpersons, 1,263 trainers, and 69,158 trainees. Stratified sampling helped to categorize TVETs into Technical and Vocational Colleges, Technical Training Institutes, and National Polytechnics. Purposive sampling selected principals, BOG chairpersons, and trainees, while proportionate sampling targeted trainers from 19 TVET institutions with functional Building and Civil Engineering programs. The final sample comprised 19 principals, 19 BOG chairpersons, 19 class representatives, and 154 trainers. Data collection utilized questionnaires, interviews, and document analysis, with validated and reliable instruments. Quantitative data underwent descriptive analysis (mean, standard deviation) and inferential analysis (correlation), while qualitative data received thematic analysis. Results were presented through tables and themes. Findings revealed that while the CBET curriculum existed, it lacked currency and adequate dissemination. Both physical and ICT infrastructure proved inadequate across most TVET institutions. The study conclusively demonstrated that insufficient physical and ICT infrastructure significantly impedes effective CBET implementation in Mt. Kenya East TVET institutions. The study proposes evidence-based recommendations for the Kenyan Ministry of Education: (1) establish and enforce timely disbursement mechanisms for TVET capitation funds addressing chronic budget shortfalls, (2) develop standardized minimum funding benchmarks for CBET implementation tied to specific program requirements, and (3) create partnership frameworks facilitating sustainable industry collaborations. These recommendations address the critical infrastructure gaps hindering effective CBET curriculum implementation in TVET institutions in Kenya.

Keywords: *CBET (Competency-Based Education CBET Training), infrastructure adequacy, industry collaborations, TVET institutions, and curriculum implementation*

How to Cite: Ringeera, C. K., Ngeera, F. G., & Murithi, S. (2025). Influence of Infrastructure Adequacy on the Preparedness of Curriculum Implementation of CBET in Public Technical Institutions in Mt. Kenya East Region, Kenya. *Journal of Education*, 5(4), 14-25.

1. Introduction

Competency-Based Education and Training (CBET) is a method of training and assessment that is directed towards achieving specific learning outcomes with emphasis on the acquisition of competencies to meet the demands of the industry and business, learner-centered teaching and learning, and learner demonstration of the required vocational skills and knowledge (KICD, 2018). Though CBET is resource-intensive, it assists individuals to acquire attitude, skills, and competencies in order to carry out a task to a specified standard under a particular situation as required by the workplace (Kumar, 2020). The CBET approach entails breaking down the course requirements into specific sets of competencies that trainees are expected to master to be declared competent (Mutungi & Muriuki, 2021). This begins with needs analysis to design curricula that align with industry demands, integrating active industry participation to shape relevant training. The implementation of curriculum refers to the actual execution or carrying out of the education plan or program (MOE, 2018). This involves putting into practice the designed curriculum, including training materials, methods, and assessments to ensure that trainees receive the intended training experiences. The sought-after outcome of any curriculum is successful transfer and/or development of knowledge, skills, and attitudes (KICD, 2018).

The objective of implementing the CBET curriculum is to ensure the curriculum is closely aligned with the skills and competencies needed by the job marketplace and industries. This helps the graduates to be more employable because of the emphasis on hands-on practical (Mutungi & Muriuki, 2021). Globally, the use of Competence-Based Education and Training (CBET) is not a novel idea, claim. In Korea, Joo (2018) posits that Competency-Based Education (CBE) is preferred over traditional models as it enhances access to post-secondary degrees and diploma acquisition to employees, addressing the skills gap in the labour market. This increases employability, and graduates are better prepared for the world of work (Adams, 2019).

In 1998, South Africa became the first country in Africa to adopt the CBET strategy successfully in order to solve the severe lack of experts, including engineers, technicians, and artisans (Simon McGrath et al., 2020). However, Rwanda encountered a number of difficulties, including a lack of parental support, huge class sizes, a deficiency of training and educational resources, and a shortage of trained instructors, which are common in many Sub-Saharan African nations (Sifuna, 2020). The development of human capital through TVET promotion must be prioritized if Kenya is to meet its goals for social development and economic progress. If a national curriculum does not generate sufficient skills that support the macroeconomic and social goals of the economy, such as income, growth, and equity, it may be deemed irrelevant. This provides the study's incentive.

1.1 Problem Statement

Adequate and state-of-the-art infrastructure, encompassing both physical (tools, equipment, classrooms, workshops, libraries, laboratories) and ICT components (hardware, software, reliable internet connectivity), is fundamental for effective CBET curriculum implementation. Ideally, TVET institutions should possess robust technological infrastructure with dependable high-speed internet, consistent electricity supply, and essential hardware to enable seamless trainee engagement without technical impediments.

However, public technical institutions in Mt. Kenya East Region face severe infrastructural deficiencies that compromise CBET implementation preparedness. Financial constraints force institutions to prioritize basic operating expenses over infrastructure development, resulting in continued reliance on outdated machinery, tools, and equipment. TVET institutions critically

lack the necessary ICT infrastructure due to high costs and insufficient technical staff competencies. Despite increased enrolment, the adequacy of physical facilities remains unchanged, forcing trainees to study in temporary structures like tents without proper equipment access.

The severity of this problem is evidenced by persistent youth unemployment despite rising TVET enrolment, highlighting a disconnect between training outcomes and industry expectations. This disconnect suggests that infrastructural inadequacies prevent institutions from delivering industry-relevant CBET curriculum effectively, undermining graduate employability and institutional credibility.

Previous studies have inadequately examined how infrastructure adequacy influences CBET implementation preparedness in this specific region, creating a critical knowledge gap. This study addresses this gap by investigating the relationship between infrastructure adequacy and preparedness for CBET curriculum implementation, testing whether significant correlations exist between these variables in Mt. Kenya East Region's public technical institutions.

2. Literature Review

Effective implementation of the CBET curriculum in TVET institutions requires a robust and specialized form of infrastructure. The blend of physical, technological, and Information and Communication Technology infrastructure plays a crucial role in the preparedness of TVET institutions for the implementation of a CBET curriculum in Kenya. The study was based on Systems theory, which was advanced by Ludwig von Bertalanffy in the 1940s and 1950s. The four basic parts of the systems model are input, output, process, and feedback. According to this idea, the funding is the input that helps the trainee go through the training and skill-building process and produce results. The output in this context is competency in skills required by the industry. The feedback is the response from the consumers and stakeholders, like the industry, employers, and parents.

Investment in technology in the TVET sector will enable Africa to catch up with developed countries (Afeti, 2017). In China, TVET institutions use technology in training delivery in order to meet the demand for a skilled labour force required in the manufacturing technologies. This has made it easy for TVET graduates to secure employment immediately after graduation, where 90% of TVET graduates find gainful employment within six months of graduation (Nathaniel, 2020). The problem-solving and critical thinking skills that may be fostered by the use of practical tools in the workshop are what Africa, and specifically Nigeria, needs today. In Kenya, Munishi (2016) indicates that there is a challenge of ICT laboratories in the TVET institutions, where one ICT lab serves over 500 trainees.

3. Materials and Methods

The study was conducted in Mt. Kenya East Region, Kenya, which reported a high number of TVET graduates unemployed. The study targeted a population of 70,591 from 21 public TVET institutions, comprising 21 principals, 21 Board of Governors Chairpersons, 128 Heads of Departments, 1,263 trainers, and 69,158 trainees. The study used a stratified sampling technique for all of the public technical institutions, which are categorized into: Technical and Vocational Colleges (TVC), Technical Training Institutes (TTI), and National Polytechnics (NP). The study further used purposive sampling to sample Principals, BOG chairpersons, and trainees whereas proportionate sampling technique was utilized on trainers from the 19 sampled TVET institutions with functional Building and Civil Engineering. The sample group

comprised 19 principals, 19 Board of Governors Chairpersons, 19 class representatives, and 154 trainers.

The research data gathered through questionnaires, interviews, and document analysis. The researcher conducted a pilot test Nairobi Technical Training Institute, given its functional Building and Civil Engineering Department, which shares similar characteristics with the public technical institutions in the Mt. Kenya East Region. The validity of the research instruments was established. The reliability in the study was determined by assessing the instruments that were pretested. Quantitative data were analysed descriptively (mean, standard deviation) and inferentially (correlation), while qualitative data underwent thematic analysis. Results were presented in a table and themes.

4. Results and Discussion

4.1 Response Rate and Reliability Results

The response rates were exceptionally high among TVET trainers (94.8%) and trainees (100%). Principals and Board of Governors (BoG)/Council members posted slightly lower rates of 84.2% and 66.7%, respectively. An overall response rate of 84.6% was noted, suggesting that the data collection was effective and yielded a solid foundation for analysis.

The reliability of data in this study was assessed using Cronbach's Alpha coefficient. A Cronbach's Alpha of 0.838 on the trainer's data. A Cronbach's Alpha value of 0.70 or higher is considered acceptable for social science research, with values above 0.90 indicating excellent internal consistency.

4.2 Demographic Characteristics of Respondents

The demographic data from various stakeholders—including trainers, principals, Board of Governors (BoG) members, and class representatives (trainees) —were collected across 21 public TVET institutions in the Mt. Kenya East Region. Concerning the trainers, the majority were relatively young. Specifically, 43.2% ($n = 63$) of the trainers were below 30 years of age, suggesting a predominantly youthful teaching workforce. In terms of gender, 60.3% ($n = 88$) of the trainers were male, while females comprised 39.7% ($n = 58$). The teaching experience of trainers confirms a predominantly early-to mid-career workforce. When asked about their level of involvement in curriculum development or review, the majority of trainers reported a moderate extent of involvement (46.6%, $n = 68$). Finally, 92.5% ($n = 135$) of trainers indicated that they had prior exposure to CBET, while only 7.5% ($n = 11$) reported no such exposure.

The demographic data of TVET principals indicated a fairly balanced representation: out of the 16 Principals interviewed, 8 were female and 8 were male. Regarding tenure, the majority of the TVET principals had between 1-6 years of experience, whereas the majority of BOG respondents had served for relatively short durations, predominantly 2 to 3 years. These findings align with the observations made by Wambua (2019), who reported that younger TVET instructors are generally more receptive to the adoption of innovative pedagogical approaches, including CBET, but often lack the extensive experience necessary for fully autonomous curriculum delivery. The demographic profiles of TVET trainees indicated that the majority were enrolled in Civil Engineering (6 out of 19), Plumbing (5), Building Technology (4), Masonry (3), Land Survey (1), and Quantity Survey (1). In terms of qualification levels, most of the respondents were at Level 6 (10 trainees), followed by Level 5 (5 trainees) and Level 4 (4 trainees).

4.3 Adequacy of Infrastructure in Preparedness of Curriculum Implementation on CBET in Public TVETs in Mt. Kenya East Region

The study employed a five-point Likert scale to assess respondents' perceptions regarding the adequacy of infrastructure in support of curriculum implementation for Competency-Based Education and Training (CBET) in public technical institutions. The scale ranged from Strongly Agree (5) to Strongly Disagree (1), with an additional option (0) for responses deemed not applicable. The aggregated results of this analysis are presented in Table 1.

Table 1: Trainers' responses on the adequacy of infrastructure in the preparedness of curriculum implementation on CBET in public TVETs

Statements on Adequacy of Infrastructure (n = 146)	SD (1)	D (2)	N (3)	A (4)	SA (5)	Mean	Std. Dev.
a) I have access to CBET-aligned teaching and learning materials	0	5(3.4%)	23(15.8%)	54(37.0%)	64(43.8%)	4.21	0.832
b) My training environment is equipped with adequate tools and equipment	1(0.7%)	15(10.3%)	51(34.9%)	60(41.1%)	19(13.0%)	3.55	0.871
c) Specialized laboratories like soil-testing labs, water testing labs, wood treating labs, and concrete labs are available	63(43.2%)	19(13.0%)	20(13.7%)	32(21.9%)	12(8.2%)	2.39	1.431
d) Workshop for every area of study like masonry, plumbing is available	5(3.4%)	35(24.0%)	30(20.5%)	50(34.2%)	26(17.8%)	3.39	1.135
e) Classroom space is conducive to CBET instructional methods	1(0.7%)	8(5.5%)	32(21.9%)	72(49.3%)	33(22.6%)	3.88	0.846
f) Assessment equipment is adequate for practical evaluations	1(0.7%)	15(10.3%)	32(21.9%)	72(49.3%)	26(17.8%)	3.73	0.897
g) Libraries are	12(8.2%)	21(14.4%)	58(39.7%)	40(27.4%)	15(10.3%)	3.17	1.066

stocked with CBET-aligned reference materials								
h The institution is connected to the national electric power grid	5(3.4%)	12(8.2%)	55(37.7%)	39(26.7%)	35(24.0%)	3.60	1.048	
i) Computers have appropriate and updated software	3(2.1%)	12(8.2%)	38(26.0%)	69(47.3%)	24(16.4%)	3.68	0.917	
j) Internet access is reliable and sufficient for training purposes	3(2.1%)	13(8.9%)	48(32.9%)	54(37.0%)	28(19.2%)	3.62	0.962	
k ICT tools are available to support CBET delivery	4(2.7%)	14(9.6%)	35(24.0%)	61(41.8%)	32(21.9%)	3.71	1.005	
l) I have access to digital learning resources to support CBET	2(1.4%)	14(9.6%)	26(17.8%)	46(31.5%)	58(39.7%)	3.99	1.044	
n Physical and ICT infrastructure are upgraded in line with evolving training needs	6(4.1%)	9(6.2%)	25(17.1%)	54(37.0%)	52(35.6%)	3.94	1.071	

The descriptive statistics in Table 1 reveal important trends regarding the adequacy of infrastructure for Competency-Based Education and Training (CBET) implementation. A strong majority of trainers (80.8%) agreed or strongly agreed that they had access to CBET-aligned teaching materials ($M = 4.21$, $SD = 0.83$), indicating high satisfaction with learning resources. Similarly, 71.2% reported access to digital learning resources ($M = 3.99$, $SD = 1.04$), though the higher standard deviation suggests some variability in experiences. These findings align with research by Mutua et al. (2019), who found that digital resource availability enhances CBET delivery.

Most trainers (71.9%) found classroom spaces conducive for CBET ($M = 3.88$, $SD = 0.85$), with low variability suggesting broad consensus. Additionally, 67.1% agreed or strongly agreed that assessment equipment was adequate ($M = 3.73$, $SD = 0.90$), reinforcing that evaluation infrastructure is relatively well-supported. ICT tools were deemed sufficient by 63.7% ($M = 3.71$, $SD = 1.01$), and 56.2% reported reliable internet ($M = 3.62$, $SD = 0.96$). However, the neutral responses (32.9% for internet reliability) suggest room for improvement, consistent with Kirior (2017), who noted connectivity challenges in Kenyan vocational

institutions. A majority (50.7%) confirmed reliable electricity ($M = 3.60$, $SD = 1.05$), while 72.6% agreed or strongly agreed that infrastructure upgrades aligned with evolving needs ($M = 3.94$, $SD = 1.07$). The latter finding suggests institutional efforts to modernize facilities, though the standard deviation indicates some dissatisfaction.

A question on the adequacy of specific physical and ICT infrastructure for CBET implementation was posed to respondents, and the findings from trainers were summarized in Table 2.

Table 2: Trainers' responses on adequacy of Specific Physical and ICT Infrastructure for CBET Implementation

Infrastructure/ICT Resources (n= 146)	SD (1)	D (2)	N (3)	A (4)	SA (5)	Mean	Std. Dev.
Specialized Workshops	51(34.9%)	27(18.5%)	25(17.1%)	36(24.7%)	7(4.8%)	2.46	1.319
Libraries	23(15.8%)	48(32.9%)	36(24.7%)	31(21.2%)	8(5.5%)	2.68	1.138
Laboratories	66(45.2%)	19(13.0%)	28(19.2%)	25(17.1%)	8(5.5%)	2.25	1.332
Classrooms	2(1.4%)	5(3.4%)	41(28.1%)	60(41.1%)	38(26.0%)	3.87	0.889
ICT Software	5(3.4%)	13(8.9%)	45(30.8%)	71(48.6%)	12(8.2%)	3.49	0.896
Reliable Internet	2(1.4%)	12(8.2%)	43(29.5%)	62(42.5%)	27(18.5%)	3.68	0.915

The findings reveal significant variations across different infrastructure components. Classrooms were rated as the most adequate, with 67.1% of trainers agreeing or strongly agreeing (A+SA) on their suitability ($M = 3.87$, $SD = 0.89$), indicating strong satisfaction with minimal variability. Similarly, ICT software (56.8% A+SA; $M = 3.49$, $SD = 0.90$) and reliable internet (61.0% A+SA; $M = 3.68$, $SD = 0.92$) were perceived favourably, though the moderate standard deviations suggest some inconsistency in experiences.

In contrast, specialized workshops were viewed as inadequate, with 53.4% disagreeing or strongly disagreeing (D+SD; $M = 2.46$, $SD = 1.32$). The high standard deviation indicates substantial disagreement among respondents. Libraries also showed mixed perceptions, with 48.7% expressing dissatisfaction (D+SD; $M = 2.68$, $SD = 1.14$), while laboratories had the lowest ratings, with 58.2% reporting inadequacy (D+SD; $M = 2.25$, $SD = 1.33$). A notable portion of respondents remained neutral on ICT software (30.8%) and internet (29.5%), suggesting uncertainty or variability in access. The strong positive perceptions of classrooms, ICT software, and internet connectivity align with research emphasizing the importance of digital resources in CBET (Ngcwangu, 2015). However, the high dissatisfaction with specialized workshops and laboratories reflects a critical gap in hands-on training facilities, which are essential for competency-based learning (Ondieki et al., 2019).

During interviews, principals were asked to explain how their institutions fund the implementation of the CBET curriculum. The argument from the principal regarding the nature of ICT infrastructure available to support CBET implementation in their institution revealed several key trends in ICT readiness. Most institutions reported having basic ICT equipment, frequently citing resources such as “computers,” “projectors,” and “internet connectivity.”

These experiences are consistent with Okolie et al. (2020), who observed that outdated equipment hampers alignment between training and current industry standards. It also emerged that some institutions have adopted advanced systems such as “LMS,” “virtual classrooms,” and “Digital Studio,” with one principal highlighting a “collaboration with... Strathmore University on IoT.” The study further required principals to describe measures they had implemented to establish physical and ICT infrastructure for CBET curriculum delivery. Their responses revealed a range of approaches encompassing strategic resource mobilization, progressive ICT integration, and innovative space utilization. The convergence of qualitative and quantitative data revealed main challenges in infrastructure to include chronic shortages in physical facilities, disparities in ICT readiness, and safety and maintenance deficiencies.

4.4 Extent to which Curriculum Implementation on CBET has been implemented in Public TVETs in Mt. Kenya East Region

The extent to which Curriculum Implementation on CBET had been implemented in Public TVETs was measured by examining elements that focused on curriculum integration and CBET adoption, practical training and workplace exposure, assessment and continuous improvement, industry collaboration and alignment, and trainee empowerment and employability. The findings are summarized in Table 3.

Table 3: Trainers’ responses on the extent to which curriculum implementation on CBET has been implemented in the public TVET institutions in Mt Kenya East Region

S/N	Statements (n = 146)	SD (1)	D (2)	N (3)	A (4)	SA (5)	Mean	Std. Dev.
a)	CBET has been formally adopted and implemented in all relevant programs	6(4.1%)	6(4.1%)	65(44.5%)	47(32.2%)	22(15.1%)	3.50	0.941
b)	Workplace simulations are included in training programs	3(2.1%)	6(4.1%)	10(6.8%)	59(40.4%)	68(46.6%)	4.25	0.908
c)	Workplace attachments are included in training programs	2(1.4%)	11(7.5%)	40(27.4%)	64(43.8%)	29(19.9%)	3.73	0.912
d)	Industry stakeholders are involved in the development, review of the curriculum and CBET delivery.	3(2.1%)	5(3.4%)	48(32.9%)	70(47.9%)	20(13.7%)	3.68	0.830
e)	Competency-based assessments are being regularly conducted	3(2.1%)	22(15.1%)	42(28.8%)	54(37.0%)	25(17.1%)	3.52	1.012
f)	Trainees are aware of how CBET links to	3(2.1%)	1(0.7%)	20(13.7%)	66(45.2%)	56(38.4%)	4.17	0.842

	future job roles and expectations								
g)	The CBET approach has improved trainee employability	2(1.4%)	5(3.4%)	24(16.4%)	45(30.8%)	70(47.9%)	4.21	0.932	
h)	Assessment results guide improvement of training delivery	4(2.7%)	4(2.7%)	24(16.4%)	49(33.6%)	65(44.5%)	4.14	0.975	
i)	There is collaboration with the industry in delivering CBET	5(3.4%)	4(2.7%)	24(16.4%)	65(44.5%)	48(32.9%)	4.01	0.958	
j)	Feedback from trainees informs CBET content improvement	4(2.7%)	10(6.8%)	38(26.0%)	72(49.3%)	22(15.1%)	3.67	0.911	

A notable finding from Table 3 is the high integration of workplace simulations, with 87.0% of trainers agreeing ($M = 4.25$, $SD = 0.91$) confirming their inclusion in programs. Similarly, trainee awareness of CBET's link to employability was strongly endorsed (83.6% combined agreement; $M = 4.17$, $SD = 0.84$), and 78.8% agreed that CBET improved employability ($M = 4.21$, $SD = 0.93$). However, formal CBET adoption across programs received mixed responses: while 47.3% agreed (32.2% agreeing, 15.1% strongly agreeing), 44.5% were neutral, and 8.2% disagreed ($M = 3.50$, $SD = 0.94$). Industry involvement in curriculum development was moderately supported (61.6% combined agreement; $M = 3.68$, $SD = 0.83$), but 32.9% neutrality suggests inconsistent collaboration, echoing global challenges in industry-TVET partnerships (Allais, 2020). The strong support for workplace simulations and trainee employability aligns with research emphasizing CBET's role in bridging skills gaps (OECD, 2018).

Qualitative data was gathered by asking the TVET Board/Council during interviews to provide feedback on the overall progress and success of CBET implementation in TVET institutions since its introduction. The repeated emphasis on "continuous improvement" reflects the flexible nature of CBET. UNESCO's (2016) global TVET report observes that successful CBET systems require ongoing adaptation based on industry input and performance data. Trainees were also interviewed to share their experiences with CBET implementation in their departments, especially in comparison to their expectations upon enrollment. Many trainees found CBET to be "more practical and hands-on than initially expected," with others describing it as "more practical and industry-oriented." Both trainees and trainers were asked to suggest the way forward for CBET implementation in public TVET institutions in Kenya. Five themes emerged from these findings. The themes included resource availability, industry collaboration, trainer capacity development, curriculum and practical training, and governance and policy support.

The study tested the null hypothesis (H_{01}) that there is no significant relationship between infrastructure adequacy and preparedness for CBET curriculum implementation, whose results are presented in Table 4.

Table 4: Correlation analysis between adequacy of infrastructure and preparedness for CBET implementation in public technical institutions in Mt. Kenya East Region, Kenya

Data from Trainers		
	Y	X1
Y	Pearson Correlation	1
Sig. (2-tailed)	Sig. (2-tailed)	
N	N	146
X1	Pearson Correlation	.405**
Sig. (2-tailed)	Sig. (2-tailed)	.000
N	N	146

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

The results reveal a statistically significant moderate positive correlation between adequacy of infrastructure and CBET preparedness from trainers' ($r = .405$, $p < .01$) perspectives. This consistent correlation coefficient across both groups indicates that as infrastructure adequacy increases, so does perceived preparedness for CBET implementation. These findings collectively lead us to reject the null hypothesis, concluding that the adequacy of infrastructure does significantly affect CBET preparedness in these institutions. These findings align with recent studies on TVET infrastructure in Kenya. Mwaura et al. (2022) found that institutions with well-equipped workshops reported 58% higher CBET compliance rates ($r = .62$, $p < .01$), mirroring the HODs' strong correlation.

5. Conclusion

This study conclusively demonstrates that inadequate physical and ICT infrastructure significantly impedes effective CBET implementation in Mt. Kenya East TVET institutions. The strong correlation between infrastructure adequacy and CBET preparedness ($r = .763$ among HODs), coupled with converging reports of improvised solutions like industry partnerships and digital labs, collectively underscores that while institutional mitigation strategies exist, systemic infrastructure gaps remain the primary barrier to successful competency-based training.

6. Recommendations

Based on the study's comprehensive findings, the following evidence-based recommendations are proposed: The Kenyan Ministry of Education should implement three key actions: (1) establish and enforce timely disbursement mechanisms for TVET capitation funds to address chronic budget shortfalls, (2) develop standardized minimum funding benchmarks for CBET implementation tied to specific program requirements, and (3) create partnership frameworks to facilitate sustainable industry collaborations.

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