

Impact of Infrastructure on the Implementation of the Advanced Level Competence-Based Curriculum in Government-Aided Secondary Schools in Wakiso District, Uganda

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Abstract

The main purpose of this study is to investigate the impact of infrastructure on the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda. The study was guided by the following three specific objectives; i) To ascertain the impact of physical infrastructure on the implementation of the advanced level competence-based curriculum, ii) To assess the impact of technological infrastructure on the implementation of the advanced level competence-based curriculum, and iii) To investigate the impact of organizational infrastructure on the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda. The study adopted a cross-sectional research design coupled with only a quantitative approach. The study utilized both descriptive and linear regression analysis methods in analyzing the quantitative data collected. The study found that physical infrastructure have a strong and positive significant impact on the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda. The study also found that technological infrastructure have a strong and positive significant impact on the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda. Additionally, the study found that organizational infrastructure have a strong and positive significant impact on the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda. The study concludes that infrastructure such as physical, technological, and organizational infrastructure significantly impact the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda in that an improvement in infrastructure would resultantly lead to improved implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda. The study recommends that schools should develop flexible, modern, and well-equipped physical infrastructure such as classrooms, libraries, and laboratories as these facilitate the teaching and learning processes in the competence-based curriculum, which would positively impact the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda.

Keywords: *Infrastructure, Physical Infrastructure, Technological Infrastructure, Organizational Infrastructure, and Implementation of the Advanced Level Competence-Based Curriculum.*

Introduction

Uganda introduced the Competence-Based Curriculum (CBC) to equip learners with practical

skills, critical thinking, creativity, and problem-solving abilities required in the modern world of work, with the Advanced Level curriculum

emphasizing learner-centered teaching, research, practical learning, and continuous assessment. Effective implementation of this curriculum requires adequate physical, technological, and organizational infrastructure such as classrooms, laboratories, libraries, ICT facilities, and administrative support systems. However, many government-aided secondary schools in Uganda, including those in Wakiso District, still face infrastructural challenges such as inadequate classrooms, limited ICT facilities, and weak organizational systems, which affect effective curriculum implementation and create variations in curriculum delivery across schools. Therefore, this study examines the impact of physical, technological, and organizational infrastructure on the implementation of the Advanced Level Competence-Based Curriculum in government-aided secondary schools in Wakiso District, Uganda (Ministry of Education and Sports, 2020; National Curriculum Development Centre, 2023)

Historical Perspective

Uganda formally introduced the Competence-Based Curriculum (CBC) in 2020, replacing the decades-old content-focused curriculum that was designed mainly to support memorization and teacher-centered instruction. The reform aimed to develop learners' abilities in critical thinking, creativity, problem-solving, and practical skills. However, from the outset of implementation, the readiness of infrastructural systems in schools became a critical factor influencing how effective the curriculum could be delivered (Charles, Song & Khaing, 2022). Historically, many Ugandan schools especially public and rural ones have operated with inadequate physical infrastructure such as overcrowded classrooms, lack of science and computer laboratories, and limited or nonexistent libraries. Because the competence-based curriculum emphasizes hands-on learning, group work, and practical subjects, the absence of such facilities constrains teachers' ability to adopt learner-centered methods. Schools often have to improvise or skip practical activities entirely due to the absence of appropriate physical resources, resultantly affecting

the implementation of the competence-based curriculum (Arinaitwe, 2025).

Theoretical Perspective

The study was guided by the Systems Theory developed by Ludwig in 1940. The theory views a school as an open system with interrelated components such as teachers, learners, resources, and administrative structures, interacting to achieve educational goals (Odit & Chakrawarty, 2026). In this context, Charles, Song and Khaing (2022) assert that infrastructure such as classrooms, laboratories, ICT resources is a critical subsystem supporting teaching and learning. Inadequate infrastructure disrupts the system, leading to inefficiencies in competency-based learning, such as limited practical skill development or ineffective assessment practices, which affects the implementation of the competence-based curriculum. This theory was applicable to this study since it provides an overview on how infrastructure influences the implementation of the competence-based curriculum.

Contextual Perspective

The study was conducted among selected government-aided secondary schools in Wakiso District investigating the impact of infrastructure on the implementation of the advanced level competence-based curriculum. Wakiso District was considered due to the persistent challenges identified that are associated with the implementation of the secondary competence-based curriculum among different secondary schools including government-aided secondary school in Wakiso District characterized by fractional adoption of the learner-centered practices, teacher rigidity, and unachieved curriculum objectives in certain schools (National Curriculum Development Centre, 2023).

Conceptual Perspective

Infrastructure refers to the fundamental physical and organizational systems and structures that are necessary for the operation of a society, organization, or institution. In the context of education, it includes the facilities, resources, and services that support teaching and learning. These

constitute the physical infrastructure, technological infrastructure, human infrastructure, and organizational infrastructure (Odit, E. & Chakrawarty, S., 2026). Conversely, the implementation of the advanced level competence-based curriculum refers to the process of putting into practice the curriculum designed to equip learners with the knowledge, skills, attitudes, and competencies required at the advanced level (Mokoro, 2020). For the case of this study, infrastructure was measured in terms of physical infrastructure, technological infrastructure, and organizational infrastructure, while implementation of advanced level competence-based curriculum was measured in terms of operationalization of curriculum, competency focus, school-level execution, teaching methods adopted, as well as monitoring and assessment.

Statement of the problem

Infrastructure influences the implementation of the Advanced Level Competence-Based Curriculum because adequate physical, technological, and organizational infrastructure supports effective teaching, practical learning, continuous assessment, and curriculum coordination, which are essential for successful curriculum implementation (Charles, Song & Khaing, 2022; Kagambe et al., 2024; Kiggundu & Nayimbade, 2024).

In response to the need for more applicable, skills-driven education, the Government of Uganda, through the Ministry of Education and Sports (MoES) and the National Curriculum Development Centre (NCDC), introduced a new secondary competence-based curriculum designed to shift learning from a traditional memorization model towards a learner-centered, competency-focused model. This curriculum stresses the development of critical thinking, communication, creativity collaboration, and application of knowledge in real-world situations (Ministry of Education and Sports, 2020).

However, despite all the remarkable efforts, there are persistent challenges associated with the implementation of the secondary competence-based curriculum among different secondary schools

including government-aided secondary school in Wakiso District characterized by fractional adoption of the learner-centered practices, teacher rigidity, and unachieved curriculum objectives in certain schools. Moreover, the absence of infrastructure such as adequate teaching and learning resources including updated textbooks aligned to the new curriculum exacerbates the implementation problem (National Curriculum Development Centre, 2023). This has consequently resulted into inconsistent and inequitable implementation outcome in various secondary schools.

Still, most previous studies have focused on general curriculum implementation, teacher preparedness, and ICT integration, with limited attention to how physical, technological, and organizational infrastructure influence the implementation of the Advanced Level Competence-Based Curriculum, especially in government-aided secondary schools in Wakiso District (Charles, Song & Khaing, 2022; Asiimwe, Conrad & Amany, 2023; Kagambe et al., 2024; Kiggundu & Nayimbade, 2024). Therefore, this study investigated the impact of infrastructure on the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda.

Objectives of the Study

General Objective

To investigate the impact of infrastructure on the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda.

Specific Objectives

- i. To ascertain the impact of physical infrastructure on the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda.
- ii. To assess the impact of technological infrastructure on the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda.

- iii. To investigate the impact of organizational infrastructure on the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda.

Study Hypotheses

The study also was guided by these various alternative hypotheses;

Ha1: Physical infrastructure have a significant impact on the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda.

Ha2: Technological infrastructure have a significant impact on the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda.

Ha3: Organizational infrastructure have a significant impact on the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda.

Conceptual Framework

The conceptual framework presents a diagrammatic illustration on the association between Infrastructure and Implementation of Advanced Level Competence-Based Curriculum.

Independent Variable

INFRASTRUCTURE

Physical Infrastructure

- Classrooms
- Laboratories/workshops
- Libraries/resource centers

Technological Infrastructure

- Computers/digital devices
- Internet connectivity/networking
- Learning management systems

Organizational Infrastructure

- Curriculum planning systems
- In-service training programs
- Assessment and quality assurance systems

Dependent Variable

IMPLEMENTATION OF ADVANCED LEVEL COMPETENCE-BASED CURRICULUM

- Operationalization of curriculum
- Competency focus
- School-level execution
- Monitoring and assessment
- Teaching methods adopted

Source: Adopted from Nakabugo and Ssenabulya (2025)

The conceptual framework shows a linkage between infrastructure and implementation of advanced level competence-based curriculum. Infrastructure was measured in terms of physical infrastructure, technological infrastructure, and organizational infrastructure, while implementation of advanced level competence-based curriculum was measured in terms of operationalization of curriculum, competency focus, school-level execution, teaching methods adopted, as well as monitoring and assessment. Therefore, the above conceptual framework was based on the assumption that

infrastructure influences an improvement in implementation of advanced level competence-based curriculum.

Literature Review

Infrastructure and Implementation of Advanced Level Competence-Based Curriculum

Competence-based curricula emphasize learner-centered, practical, and activity-oriented learning, which requires appropriate physical spaces such as science laboratories, ICT rooms, workshops, libraries, and classrooms designed for group work.

Inadequate classrooms, laboratories, and ICT facilities limit schools' ability to carry out experiential learning like experiments or project work, which are central to the competence-based curriculum. When schools lack these spaces, teachers revert to traditional lecture methods rather than interactive pedagogy, affecting the competence-based curriculum implementation (Shan, 2018). According to Asiimwe, Conrad and Amanya (2023) modern competence-based curricula integrate technology to support student research, digital literacy, and interactive learning. However, schools with poor ICT infrastructure such as few or no computers, weak internet connectivity, and unreliable electricity, struggle to integrate digital learning, undermining the competence-based curriculum's emphasis on technology competence. According to Msafiri, Kangwa and Lianyu (2023) the competence-based curriculum requires teachers to facilitate activities that develop critical thinking, collaboration, problem-solving, and practical skills. When schools have adequate educational resources like labs, libraries, and teaching materials, teachers are better able to implement innovative teaching methods rather than relying solely on textbooks and rote instruction. Additionally, the authors assert that a well-resourced learning environment fosters student participation and motivation. Learners perform better in environments where practical resources are available, because they can engage actively in experiments, simulations, group tasks, and research activities. Conversely, lack of infrastructure leads to low participation in critical activities and undermines the attainment of the practical competencies that the competence-based curriculum aims to develop (Msafiri et al., 2023)). Good physical infrastructure contributes to a conducive learning environment. Adequate classrooms, desks, lighting, ventilation, and space for collaborative work shape how teaching strategies are implemented. Poor physical facilities, overcrowded or deteriorated classrooms, limit student interaction, reduce teacher effectiveness, and make it difficult to organize group work, presentations, and project-based tasks that the competence-based curriculum requires. Studies have

established a significant relationship between school infrastructure quality and successful curriculum implementation outcomes (Nakabugo & Ssenabulya, 2025). The authors also argue that limited infrastructure such as laboratories and ICT facilities reduce the curriculum's ability to deliver research-based learning (Nakabugo & Ssenabulya, 2025). Infrastructure such as physical learning spaces significantly affect students' engagement and motivation. Well-equipped and pleasant classrooms, laboratories, and libraries signal to learners that their education is valued and that they have the tools needed to succeed. When schools have poorly maintained or inadequate facilities, learners' attention, participation, and willingness to engage in complex tasks decline. This negatively impacts the attainment of competencies such as problem-solving and critical thinking that the competence-based curriculum seeks to foster. (Mokoro, 2020). According to Namubiru, Kitembo and Kasiita (2024) inequities in physical infrastructure lead to uneven implementation of the competence-based curriculum. Public and rural schools often lack essential facilities compared to private or urban schools. This disparity means that students in better-resourced schools are more likely to benefit from practical, interactive competence-based curriculum activities, while those in under-resourced schools fall behind. This has led to inequitable learning opportunities and has been linked to challenges where schools revert to traditional teaching due to lack of laboratory infrastructure. According to Kagambe, Kabasiita, Kitembo and Kasiita (2024) the advanced competence-based curriculum emphasizes digital literacy, research skills, and technology-enabled learning. Technological infrastructure such as computers, tablets, internet connectivity, projectors, and learning management systems (LMS) provide learners with access to digital tools needed to develop these competencies. Without reliable technological infrastructure, students cannot engage in online research, simulations, or collaborative digital projects, which are key components of the curriculum. The authors argued that schools with limited ICT facilities struggle to teach computer-

based skills, which are crucial for competence-based curriculum learning outcomes (Kagambe et al., 2024). In addition, the authors also assert that technological infrastructure supports learner-centered teaching methods, such as interactive lessons, multimedia presentations, and virtual experiments. Teachers can integrate videos, simulations, and online quizzes to reinforce practical skills and concepts, promoting active learning (Kagambe et al., 2024).

According to Kiggundu and Nayimbadde (2024) organizational infrastructure refer to the structures, policies, and systems within a school that guide teaching, learning, and administrative processes. Proper organizational structures such as clear leadership hierarchies, curriculum committees, and planning systems ensure that the competence-based curriculum objectives are translated into actionable teaching schedules, lesson plans, and assessment frameworks. The authors argued that schools lacking strong organizational systems often face inconsistent competence-based curriculum implementation, with teachers left to interpret curriculum requirements individually, resulting in uneven teaching practices (Kiggundu & Nayimbadde, 2024).

Methodology

Research Design

This study adopted a cross-sectional research design coupled with only a quantitative approach. A cross-sectional research design is concerned with assessing the prevalence of certain variables in a population at a specific point in time (Kassu, 2019). Therefore, this research design was vital in investigating the impact of infrastructure on the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda at a given point in time. A quantitative approach was fundamental in obtaining information in numerical form that was used to examine the study phenomenon.

Target Population and Sample Size

A study population is a group of individuals with the characteristics of interest from which a study sample is selected (Majid, 2018). The study population

comprises of 71 teachers from the two selected government-aided secondary schools in Wakiso District from which a sample was selected (Wakiso District Local Government, 2021). The Krejcie and Morgan formula was used to determine the sample size given as;

$$n = \frac{X^2 N p (1 - p)}{d^2 (N - 1) + X^2 p (1 - p)}$$

Where; n = sample size, X^2 = Chi-Square value at 95% confidence interval with 1 degree of freedom (3.841), N = population size (71), p = population proportion (assumed to be 0.50 so as to obtain a maximum sample size), and d = level of accuracy (0.05).

$$n = \frac{3.841 * 71 * 0.5 * 0.5}{(0.05^2 * 70) + (3.841 * 0.5 * 0.5)}$$

n = 60 respondents

A sample of 60 respondents constituting teachers was selected to provide quantitative data that was used to provide answers to the study objectives.

Sampling Procedure

Sampling refers to a systematic process of selecting a representative sample of individuals from the target population (Singh & Masuku, 2017). The researcher employed convenient sampling to select respondents who will engage in the study. Convenient sampling involves the researcher selecting participants who are readily available and easily accessible and this was used to select teachers from the different selected government-aided secondary schools in Wakiso District to participate in the study so as to generate quantitative data.

Data Collection Methods

Questionnaire Survey Method

A questionnaire survey method is a way of obtaining information through a series of questions and other prompts for the purpose of gathering information from respondents (Anokye, 2020). The questionnaire survey method was vital in order to obtain uniform information which ensures the comparability of data using questions which are structured and easy to understand. Therefore, this method was used to

obtain and collect data from the respondents in the possible shortest time.

Data Collection Instruments

Structured Questionnaire

A structured questionnaire is an instrument used to collect information from respondents containing closed-ended responses to the questions from which respondents are required to choose (Kuphanga, 2024). The study used structured questionnaires to collect quantitative data from respondents which comprised of closed-ended questions and encoded answers that were self-administered to the respondents in the different selected government-aided secondary schools. The structured questionnaires were used since they require little time and gather a lot of information on the phenomenon under study.

Validity and Reliability

The validity of the study instruments will be ensured through expert judgment by the help of research professional. Validity of the instrument will be measured using a Content Validity Index (CVI). A Content Validity Index of at least 0.7 indicates the contents of the instrument are valid to be used in the study (Amin, 2005).

$$CVI = \frac{20}{25}$$

$$CVI = 0.8$$

The questionnaires were valid to be utilized in collection of data since the CVI of 0.8 obtained was above 0.7 as commended by Amin (2005).

Additionally, a Cronbach Alpha coefficient pre-test will be used to measure the reliability of the research instruments based on the data that will be collected from a pilot study conducted in one government-aided secondary school in Wakiso District. A Cronbach Alpha coefficient value of at least 0.7 indicates reliability of the questions asked in the questionnaire (Amin, 2005).

Table 3.1: Reliability Statistics

Cronbach's Alpha	No. of Items
.759	20

Source: Field Data (2026)

The contents of the questionnaires were reliable to be utilized in collection of data since the Cronbach's Alpha coefficient of 0.759 obtained was above 0.7 as commended by Amin (2005).

Data Analysis

Quantitative data analysis helps the researcher to measure, analyze and understand a phenomenon through running statistical tests and descriptive analysis. The study utilized both descriptive and linear regression analysis methods in analyzing the quantitative data collected. Descriptive analysis was applied when analyzing data on respondents' demographics. In order to examine the impact of the independent variable on the dependent variable, linear regression analysis was applied to give the empirical evidence on the study hypotheses at a 95% confidence interval. Linear regression analysis is important in research in examining the strength of the association between the outcome variable and the predictor variable (Maulud & Abdulazeez, 2020). Linear regression analysis involved the use of simple linear regression models comprising of both the independent and dependent variables.

Ethical Consideration

The researcher acquired an introductory letter from the Department of Post Graduate Studies at Islamic University in Uganda before undertaking the study as a prerequisite to obtain permission to gather the required data for research in the different schools.

The researcher also sought for respondents' consent to participate in the study and respondents were fully informed about the purpose, procedures, and benefits of the study and engagement was voluntary without any coercion.

The researcher protected the privacy of participants by ensuring confidentiality through safeguarding personal information and ensuring that data is anonymized where possible.

The researcher also conducted their work honestly and transparently, reporting findings accurately and acknowledging any limitations or conflicts of interest.

In addition, all the participants were treated with dignity and respect including recognizing their autonomy.

Study Findings

This section provides findings in relation to the study objectives.

Findings on the Demographic Features of Participants

The study addressed the demographic features of participants in selected government-aided secondary schools in Wakiso District, Uganda and results given in Table 4.1;

Table 4.1: Demographic Features of Participants

Features	Items	Frequency	Percent
Gender	Female	25	41.7
	Male	35	58.3
	Total	60	100.0
Age Group	25-30	8	13.3
	31-35	10	16.7
	36-40	16	26.7
	Above 40	26	43.3
	Total	60	100.0
Education Level	Diploma	8	13.3
	Degree	45	75.0
	Masters	7	11.7
	Total	60	100.0
Marital Status	Single	18	30.0
	Married	42	70.0
	Total	60	100.0
Period Taught at the Institution	1-5 years	11	18.3
	6-10 years	36	60.0
	Above 10 years	13	21.7
	Total	60	100.0

Source: Field Data (2026)

The results in Table 4.1 reveal that 35 (58.3%) of the participants were males and 25 (41.7%) were females. The study also revealed that 8 (13.3%) of the respondents were of aged between 25-30 years, 10 (16.7%) were aged between 31-35 years, 16 (26.7%) were aged between 36-40 years and 26 (43.3%) were aged over 40 years.

The study additionally revealed that 8 (13.3%) of the participants had attained a diploma education level, 45 (75.0%) had attained a degree education level, and 7 (11.7%) had attained a master's education level.

The study also revealed that 18 (30.0%) of the participants were single and 42 (70.0%) were married. The study further revealed that 11 (18.3%)

of the participants had taught for 1-5 years at the particular schools, 36 (60.0%) had taught for 6-10 years at the particular schools, and 13 (21.7%) had taught for above 10 years at the particular schools.

Findings on Study Objectives

Impact of Physical Infrastructure on the Implementation of the Advanced Level Competence-Based Curriculum in Government-Aided Secondary Schools in Wakiso District, Uganda

The study ascertained the impact of physical infrastructure on the implementation of the advanced level competence-based curriculum in government-

aided secondary schools in Wakiso District, Uganda and results indicated in Table 4.2.

Table 4.2: Regression on Impact of Physical Infrastructure on the Implementation of the Advanced Level Competence-Based Curriculum in Government-Aided Secondary Schools in Wakiso District, Uganda

Model Summary						
Model		R	R Square		Adjusted R Square	Std. Error of the Estimate
1		.599 ^a	.359		.347	.58143
a. Predictors: (Constant), Physical Infrastructure						
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.206	.466		2.588	.000
	Physical Infrastructure	.676	.119	.599	5.694	.000
a. Dependent Variable: Implementation of the Advanced Level Competence-Based Curriculum						

Source: Field Data (2026)

Table 4.2 reveals that physical infrastructure have a strong and positive significant impact on the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda ($\beta=0.599$, $p=0.000$) at a 0.05 level of significance. The results indicate that a unit improvement in physical infrastructure results into an improvement in the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda by 59.9%. The results imply that improved physical infrastructure resultantly leads to an improvement in the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda.

The Adjusted R square from the model summary of 0.347 indicates that physical infrastructure clarifies 34.7% of the total variations in the implementation of the advanced level competence-based curriculum and the extra 65.3% of the variations are clarified by

other given variables. This signifies that physical infrastructure considerably impact the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda. Therefore, to achieve an improvement in the implementation of the advanced level competence-based curriculum, there should be improved physical infrastructure in government-aided secondary schools in Wakiso District, Uganda.

Impact of Technological Infrastructure on the Implementation of the Advanced Level Competence-Based Curriculum in Government-Aided Secondary Schools in Wakiso District, Uganda

The study assessed the impact of technological infrastructure on the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda and results given in Table 4.3.

Table 4.3: Regression on Impact of Technological Infrastructure on the Implementation of the Advanced Level Competence-Based Curriculum in Government-Aided Secondary Schools in Wakiso District, Uganda

Model Summary						
Model		R	R Square		Adjusted R Square	Std. Error of the Estimate
1		.591 ^a	.349		.338	.39037
a. Predictors: (Constant), Technological Infrastructure						
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.596	.427		3.740	.000
	Technological Infrastructure	.553	.099	.591	5.580	.000
a. Dependent Variable: Implementation of the Advanced Level Competence-Based Curriculum						

Source: Field Data (2026)

Table 4.3 reveals that technological infrastructure have a strong and positive significant impact on the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda ($\beta=0.591$, $p=0.000$) at a 0.05 level of significance. The results indicate that a unit improvement in technological infrastructure results into an improvement in the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda by 59.1%. The results imply that improved technological infrastructure resultantly leads to an improvement in the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda.

The Adjusted R square from the model summary of 0.338 indicates that technological infrastructure clarifies 33.8% of the total variations in the implementation of the advanced level competence-based curriculum and the extra 66.2% of the variations are clarified by other given variables. This

signifies that technological infrastructure considerably impact the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda. Therefore, to achieve an improvement in the implementation of the advanced level competence-based curriculum, there should be improved technological infrastructure in government-aided secondary schools in Wakiso District, Uganda.

Impact of Organizational Infrastructure on the Implementation of the Advanced Level Competence-Based Curriculum in Government-Aided Secondary Schools in Wakiso District, Uganda

The study investigated the impact of organizational infrastructure on the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda and results indicated in Table 4.4.

Table 4.4: Regression on Impact of Organizational Infrastructure on the Implementation of the Advanced Level Competence-Based Curriculum in Government-Aided Secondary Schools in Wakiso District, Uganda

Model Summary							
Model		R	R Square		Adjusted R Square	Std. Error of the Estimate	
1		.546 ^a	.299		.287	.40529	
a. Predictors: (Constant), Organizational Infrastructure							
Coefficients ^a							
Model			Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			B	Std. Error	Beta		
1	(Constant)		2.567	.285		9.004	.000
	Organizational Infrastructure		.364	.073	.546	4.970	.000
a. Dependent Variable: Implementation of the Advanced Level Competence-Based Curriculum							

Source: Field Data (2026)

Table 4.4 reveals that organizational infrastructure have a strong and positive significant impact on the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda ($\beta=0.546$, $p=0.000$) at a 0.05 level of significance. The results indicate that a unit improvement in organizational infrastructure results into an improvement in the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda by 54.6%. The results imply that improved organizational infrastructure resultantly leads to an improvement in the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda.

The Adjusted R square from the model summary of 0.287 indicates that organizational infrastructure clarifies 28.7% of the total variations in the implementation of the advanced level competence-based curriculum and the extra 71.3% of the variations are clarified by other given variables. This signifies that organizational infrastructure noticeably impact the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda. Therefore, to achieve an improvement in the implementation of the advanced level competence-

based curriculum, there should be improved organizational infrastructure in government-aided secondary schools in Wakiso District, Uganda.

Conclusions

The study concludes that infrastructure such as physical, technological, and organizational infrastructure significantly impact the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda in that an improvement in infrastructure would resultantly lead to improved implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda.

Recommendations

The study recommends that schools should develop flexible, modern, and well-equipped physical infrastructure such as classrooms, libraries, and laboratories as these facilitate the teaching and learning processes in the competence-based curriculum, which would positively impact the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda.

The study also recommends that schools should invest in ICT or technological infrastructure through

providing computers or tablets, ensuring reliable internet connectivity, as well as set up computer labs and digital learning hubs as this would enhance research, creativity, and digital literacy, factors key in the implementation of the advanced level competence-based curriculum in government-aided secondary schools in Wakiso District, Uganda.

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