

Individual Consideration Practices of Principals on Teachers Integrating Information Communication Technology in Public Secondary Schools in Kenya

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DOI: <https://dx.doi.org/10.47772/IJRISS.2024.805045>

Received: 18 April 2024; Revised: 30 April 2024; Accepted: 04 May 2024; Published: 03 June 2024

ABSTRACT

Leadership behavior is one of the issues that has received a lot of attention internationally, particularly the personal considerations of a transformative leader. A teacher's confidence grows under the supervision of a good leader who can handle particular requirements, including a lack of ICT competency and the availability of additional technologies. This study sought to determine the extent to which Principals' individual considerations practices influence teachers' adoption of technology in classroom instruction. The present inquiry adopted a mixed method approach built on an explanatory sequential design. Data was collected from 62 principals and 186 teachers using interviews and questionnaires. from public secondary schools in Kakamega county Expert judgment was used to validate the instrument, obtaining a Cronbach coefficient Alpha index of 0.75, while the test-retest method was used to determine the reliability of the research instruments. Quantitative data were analyzed using frequencies, percentages, and Pearson correlations. In contrast, qualitative data were examined by grouping common themes and characterizing participants' ideas and viewpoints. The findings revealed a significant relationship between principals' individual consideration and the integration of ICT in teaching and learning ($r^{(108)} = 0.584, p < 0.001$) meaning encouraging the practice of individual consideration would increase use of ICT in Instructions. This paper recommends that principals must prioritize the unique demands of teachers. This will inspire and instill trust in teachers on the utilization of technology.

Keywords: Individual Consideration, Information Communication Technology, Transformational Leadership

INTRODUCTION

Organizations worldwide are becoming increasingly interested in the use of information and communication technology (ICT). Businesses mostly attribute this to its high level of efficiency and effectiveness in day-to-day operations, many organizations require transformational leadership to meet the demands of the twenty-first century work environment, in which technology has taken center stage (Gumusluoglu & Ilsev 2009; Mitul & Kabir, 2019). In Kenya principals are considered to be significant determinants of ICT integration, hence the government expect them to be at the fore front of encouraging teachers on use of technology. The current ICT Frame work policy encourages teachers in acquiring the most recent ICT skills, that can help in selecting appropriate content, and determining the most effective pedagogical strategies for integrating

technology into their instructional practices (Baraza & Peter, 2021). This can be realized through a transformational leader who can engage teachers by mentoring them in adopting ICT in school Muia (2018). Studies have discovered a link between individual consideration of transformative leadership and the usage of ICT in teaching and learning (Yamamoto & Yamaguchi, 2019; Ruloff & Petko, 2022). These studies consider school leaders' actions to have a positive influence on digital change consequently, enable teachers to use technology in class in a more demanding manner (Schmitz, Antonietti, & Console, 2023). Teachers who were mentored by administrators who demonstrated transformational leadership reported higher levels of work satisfaction, found increased creativity in teaching approaches, higher student results, and more interest in the usage of digital tools in class (Kariuki, Piliyesi, & Ateka, 2018). A transformative leader's guidance instills trust in educators, leading them to embrace technologies into their teaching and learning practices proactively.

Individual consideration refers to the purposeful and attentive act of meeting employees' personal wants and desires. Teachers' expectations differ from person to person, covering a wide variety of skill competencies, resources, and personal needs. Principals who display such behavior foster a connection with their instructors that is marked by productivity and confidence. (Hennessey, 2010; Odhiambo, D, 2022) have attributed poor adoption of ICT in teaching and learning to a lack of ICT competence reducing confidence in use of ICT, a lack of motivation, insufficient infrastructure, and a lack of internet access, while failing to consider a leader's actions, which are critical and may have a positive or negative impact on the effective incorporation of information and communication technologies in an educational setting Ferguson (2022). Principals who lack all transformational characteristics may not use useful ICT tools in teaching and learning, making instructors uncomfortable with ICT in the classroom. (Achieng, 2013; Adegbenro, Gumbo, & Olakanmi, 2017).

Transformational leadership has been shown to have a positive impact on the integration of information and communication technology (ICT) into educational practices in developed nations. Wells and Lewis (2006) studied internet access in public schools and classrooms in the United States and discovered that it increased from 3% to 94%. Furthermore, they guaranteed that schools had enough computers, reducing the student-to-computer ratio from 12:1 to 3:1, thereby improving students' writing. (Berry & Wintle, 2009; Bebell & Kay, 2010). These studies found that administrators who practiced transformational leadership encouraged teachers to use the internet.

While ICT has been successfully incorporated into education in western countries, teachers in sub-Saharan Africa are still falling behind in their utilization of technology for classroom instruction, leading to widening the digital divide (Asaba 2017). Limited access to technology resources, such as computers and internet connectivity, can hinder their ability to incorporate ICT into their teaching practices. Additionally, a lack of training and support in using technology tools and cultural barriers to technology adoption can further impede their utilization of technology in the classroom Maria-Luisa, Chiara, Tessa, Alberto, Philipp, and Petko (2023).

The Kenyan government has implemented several initiatives to enhance the integration of ICT in education. One such initiative is the investment in fiber infrastructure to enhance internet connectivity in schools Molly, Donkor, Paul, & Olutola (2020). The government also oversees digital literacy initiatives, providing training to teachers in the development of digital content (Republic of Kenya, 2018) In addition, head teachers have received training in leadership skills to support the integration of ICT in teaching and learning. These initiatives have aimed to improve access to technology and build the capacity of teachers and school leaders to utilize ICT for educational purposes. Despite the extensive efforts made, the majority of students in the education system fail to meet the requirements for competitive jobs.

Maende, Odebero, and Kaberia (2018) conducted research on school leadership, academic activities, and student performance in Kakamega County. The results demonstrated that a sizable portion of applicants

from Kakamega County were deemed unfit for admission to public universities. This underachievement in terms of students' qualifications for competitive careers could be attributed to inadequate leadership; principals are supposed to coach, mentor, and provide teachers with sufficient ICT resources so they can use the same with the students. The participants in separate research on transformative leadership Ferguson (2022) expressed a need for more opportunities for professional growth and more support. According to this recommendation, it is clear that further action is required to focus on the individual assessment of transformational leadership methods for enhancing staff proficiency in integrating ICT in teaching and learning. This study is to examine how the practice of transformational leadership, specifically individual consideration, affects the incorporation of information and communication technology (ICT) in teaching and learning. The goal is to gain insights and make recommendations on how to improve staff proficiency in using digital tools for educational purposes. The investigation is guided by the research hypothesis. H01: There is no statistically significant correlation between the principal's consideration and the integration of ICT in teaching and learning in public secondary schools in Kakamega County.

LITERATURE REVIEW

Individualized consideration refers to the practice of attentively addressing the unique wants and requirements of employees within an organizational context. The demands of teachers exhibit variability across individuals, encompassing a range of requirements such as a limited proficiency in utilizing information and communication technology (ICT). Transformational principals exhibit a high level of care for teachers, seeing them as unique individuals, comprehending their challenges, and attentively considering their concerns and suggestions regarding the necessary resources for incorporating ICT in the classroom (Muller, Wood, & Specht, 2008).

Ferguson (2021) studied transformational leadership and digital technology in urban junior education institutions in Columbia. The study explored principals' influence on the usage of ICT in instruction; this study was qualitative and adopted convenience sampling of 29 primary teachers. The research instruments included semi-structured interviews and focus groups. Findings revealed that four elements of transformational leadership were connected and affected elementary teachers' ICT usage and attitudes towards its use. The study revealed that a majority of the interviewed instructors confirmed that principals provided them with tutorial links pertaining to the utilization of specific platforms during online instructional sessions. According to their conversations, teachers who received professional development support for using ICT tools reported that it strengthened their service delivery and resulted in better educational outcomes for students. There were some drawbacks; for instance, it was conducted in Columbia in a different environment and not in Kakamega county. Secondly, the study focused on 29 sampled teachers, unlike the current study, whose sample was 62 public secondary schools in Kakamega county. Qualitative research was adopted, which could likely not give positive feedback if results were not verified, unlike Mixed Methods, where quantitative findings strengthen qualitative findings. The study also used convenience sampling may produce biased results as they are dealing with people who are easily accessible and may have interacted with ICT for a short period. Therefore, this study sought to address the study question about the extent to which individual consideration of transformational leadership approach by Principals to the integration of ICT influence instruction in Public High Schools in Kakamega County.

Imran (2017) studied incorporating digital tools in high school education under the new education policy in Bangladesh. Specifically, they examined the extent of technology usage in classrooms, the impact of technology on curriculum instruction, and factors hampering enhanced ICT use. The researchers interviewed teachers and focus group to gather information on use of ICT in schools. The study findings revealed that most teachers needed help to develop digital content. Principals are expected to stimulate teachers intellectually to solve problems like developing content independently as learners get attached to creative teachers. They also found that the stakeholders, the principals in the education sector, need more

time to induce changes in behavior patterns among educators and learners to implement ICT successfully. This research work faced some setbacks; for instance, the study looked at the approach of inclusion of technologies in high school education, which deviates from the present study linking transformational leadership and ICT integration. Exploration was done in a developed country context which may affect the generalization of the findings. Data was obtained through focus group discussions and interviews known to have no record, snap judgment, and mentally disturbing. On the other hand, focus group discussions are known to be biased and problematic in getting honest opinions.

Gyansah (2020) investigated the effects of transformational leadership on the academic merit of learners in Ghana government-funded secondary institutions. The study adopted a convergent parallel design. The research focused on 19 heads of schools; based on Slovin's sample calculation formula. The study adopted ordinary least squares regression (OLS) model to ascertain the causal effect between study factors. The study's findings indicated that the presence of transformational leadership attributes, specifically individual consideration, had a favorable impact on student achievement. The study recommended that managers collaborate with instructors in a collegial manner, taking into account the specific requirements of teachers, in order to enhance students' academic achievements. Nevertheless, there were some limitations; first, the study linked the school head's transformational leadership practices to students' academic accomplishment instead of the current research linking the principal's transformational leadership influence and ICT implementation in instruction. Secondly, they used a smaller sample of 19 head teachers who may likely not portray the study problem compared to this study, which has a population of 62 principals. The study used a convergent parallel design, which may only work well if the quantitative and qualitative results do not contradict.

Adegbenro, Gumbo, and Olakanmi (2017) did needs assessment in secondary schools in Pretoria in Gauteng Province, South Africa, to establish challenges facing teachers in secondary schools in using ICT in classroom instructions. The sample included 21 in-service volunteer teachers selected from two well-equipped schools with computer systems and interactive whiteboards. Results showed that most teachers were incompetent in web design, software installation, MS Access database creation, and using electronics for teaching. Many educators needed to learn fundamental computing skills like e-mail and internet usage. In addition, the investigation revealed that instructors were optimistic about using digital tools and integrating them into curriculum instruction. The findings reveal a gap in teachers' competence in ICT usage in instruction. Teachers feel motivated when they are guided on the use of technology. Visionary principals encourage educators to adopt ICT tools in curriculum instruction willingly. Secondly, the study used a small sample of 21 in-service teachers who may likely fail to portray a positive picture of the phenomenon in contrast to the present research, which has a substantial sample size of 186 teachers from 62 public high schools in Kakamega County. Besides, the research looked into the needs assessment of ICT enhancement in education, unlike the present study, which is centred on Principals transformational leadership influence and incorporation of technology into educational delivery in government-funded high schools in Kakamega County.

Kitur K. and Choge J. (2021) examined the correlation between the transformational leadership style of principals and the academic achievement of secondary pupils in the Kenya Certificate of Secondary Education (KCSE) in Bomet County, Kenya. The study utilized a descriptive survey research approach, targeting a sample of 109 Director of Studies and five Quality Assurance and Standards Officers. The study revealed that there was a statistically significant but decreased relationship between tailored consideration and pupils' academic achievement in KCSE. Furthermore, the study suggests that the training of school principals should prioritize individualized consideration. However, the study had limitations. One limitation was that it used a descriptive research design, which is known for its inability to establish cause and effect relationships. Additionally, the variables in the study could not be manipulated. In contrast, the current study used a mixed method sequential explanatory design, which can overcome the weaknesses of both

qualitative and quantitative data, resulting in more comprehensive findings. Furthermore, the study examined the correlation between transformational leadership and students' academic performance, which is beyond the focus of the current study. The current study specifically investigated the individual consideration practice of a transformational leader and teachers' integration of ICT into teaching and learning.

Ndiritu, Gichimu, and Ndiritu (2018) conducted a study on the problem of the missing piece in the integration of information and communication technology (ICT) by transformational school administrators inside the classroom setting. The study focused on a sample of 40 secondary schools located in Kiambu, Kenya. The researcher used questionnaires given to managers of secondary schools as an instrument for collecting data only. The researchers discovered a positive correlation coefficient of 0.560 between teachers' use of information and communication technology (ICT) in instructional practices and the level of support from the school's administration. It is advisable that policy planners give priority to the ICT training of all school managers. It is recommended that individuals engage in training within their daily activities to build a precedent for the utilization of information and communication technology (ICT) tools within the educational setting. Nevertheless, there were certain limitations in the study. For instance, the study specifically examined 40 secondary schools in Kiambu, but the current study focused on 62 secondary schools located in the western area of Kenya, which has a distinct environment. Furthermore, the data collection tool utilized was a questionnaire, which has the potential to yield inconsistent outcomes if not properly comprehended by the responder (Idahosa & Akagibe, 2021). The current study utilized a range of research instruments, such as interview guides, document analysis, observational checklists, and questionnaires.

Tenai (2017) conducted a qualitative study on teacher-variables that impact the integration of ICT technologies in teaching English language in 54 Kenyan high schools. The researcher utilized a descriptive survey design and employed the Diffusion of Innovation theory and the Rand Agency theory, which primarily focuses on the product of innovation. She discovered that 30.4% of teachers exhibited a deficiency in computer proficiency, namely in their ability to generate audio or video clip presentations. Similarly, 30.4% were confident to a slight extent, and 26.1% and 13.0% of the study sample were very confident about computer use. These statistics show that a greater percentage of teachers lack the confidence to use computers. This implies that teachers need collegial support from a transformational principal who can understand their needs. The researcher will focus on the individual considerations and practices of principals regarding the integration of ICT in teaching and learning. Though the study focused on English teachers, it had some limitations. Firstly, the investigator used a qualitative study, which is known to have the disadvantage that its findings cannot be extended to wider populations with the same degree of certainty that mixed method approaches can. Mixed method approaches can offer more robust evidence to the question of transformational leadership practices and ICT integration in schools. Secondly, the study focused on English teachers, whereas the current study advocated for technology adoption by all teachers Kothari's (2008).

RESEARCH METHODOLOGY

Research Design:

The study adopted a mixed method sequential explanatory research design. By employing a mixed method, the researcher successfully integrated quantitative and qualitative data, so mitigating the limitations of each methodology and enhancing comprehension of the hypothesis. H01: There is no statistically significant relationship between the principal's consideration and the integration of ICT in teaching and learning in public secondary schools in Kakamega County. The researcher employed a sequential explanatory study methodology that involved collecting quantitative data initially, followed by qualitative data on several occasions (Creswell & Clark, 2011; Robson & McCartan, 2016). The qualitative method involves the

collection of non-numerical data using open-ended questionnaires and interviews, aiming to get thorough information on the phenomenon being studied (Orodho, 2009). On the other hand, the quantitative approach focuses on gathering data that can be measured and quantified. The combination of both quantitative and qualitative data helps the researcher to comprehend the study issue and accomplish the objective by eliminating the weakness of each approach and gaining from their strength (Creswell & Clark, 2011; Cheruse.; Ngeno. & Kaptingei (2020)

Target Population;

The investigator targeted 69 principals of public secondary schools, 552 teachers, 4140 form 3 students and 1 county quality assurance officer in Kakamega county.

The sample size and sample technique:

The sample size comprised 62 principals, 186 teachers, 365 students, and one county Quality Assurance Officer. The researcher used purposive sampling to pick QASO, whereas they adopted the simple random sample technique to select teachers and pupils. The principals, being the heads of the participating schools, were automatically included in the sample. The researcher deemed the target population of 69 schools to be comparatively small, obviating the necessity for sampling. Using a simple random sampling approach, the study selected 7 schools out of a total of 69 for the pilot phase. For the main study, 62 schools were chosen. Kothari (2004) states that for each investigation, the recommended sample size should range from 10% to 30% of the whole population.

Research Instruments:

The study used interview guides, questionnaires, checklists, and document analysis to collect data

Questionnaires

To assess the questionnaire's test items, the researcher employed the Multifactor Leadership Questionnaire (MLQ) Form 5. The MLQ Form 5 is commonly used in companies where the consequences of influence are held accountable (Bass and Avolio 1995). The reason for using MLQ for this research is that it has the potential to test a variety of transformational leadership traits. The traits are based on the four categories of transformative leadership: idealized influence, individual consideration, intellectual inspiration, and motivation on the integration of ICT in teaching and learning.

Interview guides

The researcher got information from the selected respondents willing to engage in the interview in the qualitative approach's second phase. Creswell (2014) agree that positivist scholars' knowledge is considered observable and measurable therefore examining individual behavior is dominant in the Post-Positivism Paradigm. The researcher interviewed the principals to understand their influence on ICT integration in school. The also interviewed the County Quality Assurance officer (CQUASO). The tool was appropriate as it allowed the researcher to have authority to ask oral questions to the participants and make comments leading respondents to give data (Mugenda & Mugenda, 2012).

Observation Checklist

Kothari (2004) describes the Observational checklists as an instrument for research utilized to gather data by recording and observing the variables under study to determine their behavior in a realistic environment. The researcher used the checklist to confirm the availability of IT in school, also to confirm if the

technologies were in good shape for use in the classroom.

Document analysis

Document analysis is a systematic approach that employs qualitative methods to examine both printed and electronic documents within a targeted area. Corbin and Strauss (2008) describe it as a cost-effective method for data analysis, which was the primary reason for its selection by the researcher in this study. The scope of the analysis included a review of the school’s ICT policies regarding digital tool utilization, an examination of the Kenya Certificate of Secondary Education (KCSE) results, and an assessment of classroom attendance records.

Pilot study

Pretesting of research tools was conducted in 7 schools that were not included in the main sample. The investigator interviewed 7 principals, Questionnaires on the transformational leadership influence were distributed to 21 teachers, and 6 students were chosen to fill out the questionnaire to validate the usage of ICT integration in curricular instruction. According to Hertzog (2008), a sample size of 10-40 individuals is acceptable for evaluation. In this situation, the total sample size is 32, as recommended by Hertzog (2008). Pilot study was primarily to ascertain the validity and reliability of the instruments prior to the main research. Before piloting the research sought assistance from experts in the department of policy and curriculum studies to help in expert judgement of the tools, The test-retest approach was utilized to determine the reliability of the instrument, yielding an index of 0.75 of the Pearson’s correlation coefficient.

Data Analysis

The researcher used Statistical Package of Social Science (SPSS) to evaluate data from completed questionnaires. Data was analyzed in accordance with the study objective in order to evaluate the hypothesis. quantitative data was given in tabular form and analyzed using multi-regression analysis. Thematic analysis was used for qualitative data that was given in narrative form. In order to analyze the acquired data, the researcher used descriptive and inferential statistics

Logistical and Ethical consideration

Logistical and ethical considerations are study principles that researchers must adhere to in order to avoid violating the rights of participants. In this study, the researcher obtained written agreement from the participants in the study. The written consent assured the participants that the aim of the research in Kakamega was strictly academic and that they would stay anonymous. Individuals who choose to engage in scientific research should do so of their own accord and without any form of coercion or obligation (Creswell, 2014)

Data Analysis and Discussions

Table 1: Principals’ responses on Individualized Consideration on intergration of ICT in teaching and learning.

Statements	Responses										Mean	Std. Dev
	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree			
	N	%	N	%	N	%	N	%	n	%		
Mentor and coach, the teachers on the usage of technologies during classroom instruction.	0	0	3	5.6	18	33.3	26	48.1	7	13	3.69	0.773

Encourage and help teachers to pursue professional growth and be effective in teaching.	0	0	0	0	2	3.7	44	81.5	8	14.8	4.11	0.42
Support teachers by ensuring sufficient computers for use during teaching and learning.	0	0	0	0	22	40.7	26	48.1	6	11.1	3.7	0.662
I am aware of individual needs and, therefore, available for consultations and Support for the good of the learning outcome.	0	0	1	1.9	22	40.7	24	44.4	7	13	3.69	0.722
The school has an ICT technician who comes in to support in case a teacher encounters a challenge with technology usage.	0	0	4	7.4	16	29.6	22	40.7	12	22.2	3.77	0.883
Wi-Fi connectivity provided in the school is reliable.	1	1.9	4	4.4	11	20.4	25	46.3	13	24.1	3.83	0.947

Table 1 displays items assessing individual consideration: The results show that principals rated all elements on how their personal consideration affects ICT use in teaching and learning. Mentoring and coaching were investigated. 26 (48.1%) agreed, 7(13%) strongly agreed, 18(33.3%) were neutral, and 3(5.6) disagreed. Mentoring and coaching are crucial to skill development since they show the principal’s support for workers. The results are similar to (Kariuki, Piliyesi, Ateaka, (2018) Principal’s transformational leadership and teachers’ performance in Kenyan public secondary schools. They established that teachers who were mentored by transformational principal reported job satisfaction.

Promoting teacher professional development (81.5%), 8 (14.8%) strongly agreed, and 2 (3.7%) were neutral. Helping instructors pursue professional development had the highest weighted mean 4.11. These findings demonstrated that Kakamega principals recognized teachers’ diverse abilities and fostered ICT professional development. These findings are consistent with those of Sikalie and Linge (2017), who conducted a correlation and distributed questionnaires to 226 managers to investigate the effect of personalized attention from managers on worker productivity in small and medium-sized businesses (SMEs) in Kenya. The findings revealed that when leaders encourage self-professional development practices, high performance results.

Regarding adequacy of computers for use, 26 (48.1%) agreed, 6 (11.1%) strongly agreed, and 22 (40.7%) were neutral on providing appropriate computers for teaching and learning. Public school principals must ensure government plans, including ICT integration, are implemented.

consultation availability and Support was split: 24 (44.4%) agreed, 7 (13% severely disagreed), and 1 (1.9) disagreed. Daily consultation is important; instructors feel appreciated when heard. These findings mirror the reality in Kenyan schools, where principals have several obligations that limit their time to communicate freely with teachers. The findings are similar to Gyansah (2020) who pointed out that principals have many responsibilities on their table sparing 60 minutes for consultations takes time and this may affect use of ICT in class.

Regarding how much the school’s ICT technician helps instructors with IT issues. The statement was agreed upon by 22 (40.7%), highly agreed by 12 (22.2%), neutral by 16 (29.6%), and disagreed by 4 (7.4%).

Principals’ technical support for instructors is crucial. The recent results confirm Nangandu (2019) and Yilmaz (2011), who stressed the necessity of schools giving technical support to instructors using classroom facilities.

Remarks about the school’s Wi-Fi connectivity drew mixed reactions. 25 (46.3%) agreed that Wi-Fi was reliable, 13 (24.1%) strongly agreed, 11 (20.4%) were neutral, 4 (4.4%) disagreed, and 1 (1.9%) severely disagreed. Despite wide disparities in Wi-Fi availability responses, some schools disagreed. The Kenyan government has been attempting to provide internet connectivity throughout the country as well as national optic fiber for simpler access, according to Molly, Donkor, Paul, and Olutola (2020), but the problem persists, particularly in rural regions

Table 2: Teachers responses to principals’ Individualized Consideration on intergration of ICT in teaching and learning.

Statements	Responses										Mean	Std. Dev
	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree			
	N	%	N	%	N	%	n	%	N	%		
Training is provided for system operations.	1	0.8	5	3.8	50	37.8	68	51.5	8	6.1	3.58	0.699
The school Principal facilitates training on ICT usage in the classroom.	0	0	3	2.3	45	32.1	70	53	14	10.6	3.72	0.68
The school technician supports the teachers in using ICT Materials when required.	0	0	2	1.5	75	56.8	50	37.9	5	3.8	3.44	0.596
Adequate internet service providers.	0	0	2	0	31	23.5	52	39.4	49	37.1	4.14	0.769
I have virus protection software running on my computer.	0	0	7	5.3	36	27.3	66	50	23	17.4	3.8	0.789
I use my computer to Prepare for my lesson, set exams, and key my results.	1	0.8	4	3	39	29.5	55	41.7	33	25	3.87	0.851

The specific constructs examined under the category of individual consideration leadership conduct included teacher training (mentorship), technical assistance, supply of accessible wi-fi, and adequacy of computers. Each concept assessed the degree to which it is implemented by the principals and its impact on the incorporation of ICT in teaching and learning. These findings are summarized in table 2. Concerning the training of teachers on system operation, the mean (M) = 3.58 and the standard deviation (SD) =0.699. This weighted mean aligned with the practice of providing teachers with assistance in enhancing their skill development. However, more professional development is needed for effective classroom instruction. Tenai (2017) found that 30.4% of educators lacked computer proficiency and struggled to create audio or video clip presentations. The Teachers Service Commission surveyed 1200 purposely selected schools. The study found that 86.2% of public-school instructors reported facing incorporating technology issues. Thus, these issues were the main cause of educators’ professional skill gaps, affecting the quality of education (Oduor, 2018; Wanzala & Nyamai, 2018).

Regarding the provision of assistance by the school technician in the event of classroom issues, the mean (M) is 3.44 and the standard deviation (SD) is 0.596. The teachers concurred with the practice of technicians providing them with support. This practice should be strengthened. Imran (2017) found that many teachers

struggle to create digital content. This means that educators want collegial help from a transformational administrator who understands and meets their needs. Teachers received internal training from the school technologist, who is classified as support employees, according to the document analysis (staff minutes).

Regarding the adequacy of internet connection in schools, instructors were able to access the internet at their particular schools. The mean score for adequacy was 3.4 with a standard deviation of 0.596.

Regarding the utilization of computers in the creation of lesson plans and work schemes, the mean (M) is 3.87 and the standard deviation (SD) = 0.851. The qualitative study results indicate that the implementation of individual consideration by principals has a significant impact on the integration of ICT in teaching and learning. Development of lesson plan is essential in the teaching fraternity for effective classroom delivery. This result is an indication that teachers receive support in this aspect. The findings of this study are consistent with the research conducted by Namuge (2019), which examined the extent to which ICT is integrated in the classroom as one of its research objectives. The results of the study indicated 86%, engaged in various responsibilities such as developing instructional materials and overseeing administrative duties, which encompassed the maintenance of student academic records, including the monitoring of grading. However, it was found through research that 40% of these educators sought support from online platforms or cyber resources throughout their endeavor. The observed phenomenon could be attributed to the availability of online resources that are easily accessible and downloadable, as evidenced by a study conducted by Mohamed and Imrjan (2014).

Correlation analysis between Individual consideration of the principal’s behavior and Integration of ICT in teaching and learning

The correlation analysis was done to establish the existence of association/relationship between independent variable individualized consideration and dependent variable ICT integration in classroom.

Table 3: Correlation Matrix for Individualized Consideration and ICT Integration

	ICT Integration in Classroom	Individualized Consideration
ICT Integration in Classroom	1	
Individualized Consideration	.584**	1
N	.000 108	108

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

From the findings displayed in table 3, there is a statistically significant positive relationship between individual consideration and ICT integration in teaching and learning $r(108) = 0.584, p < 0.001$. This indicates that there is a moderately strong and positive correlation between the extent of ICT integration in the classroom and the level of individualized consideration demonstrated by educators. In other words, as the integration of information and communication technology (ICT) in the classroom increases, so does the tendency for teachers to exhibit a higher degree of individualized consideration towards their students, suggesting that technology integration may have a positive impact on personalized teaching approaches.

Table 4: Model Summary for Individualized Consideration

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.584	0.341	0.334	1.31571

The model summary findings for the regression analysis displayed in table 4 between predictor and response variable illustrates that individualized consideration accounts for approximately 34.1% of the variability in ICT integration in classroom (Adjusted $R^2 = 0.334$). suggesting a moderate predictive correlation. This implies that 65.9% is unexplained by the model and could be attributed to other factors not in the Model.

The Regression analysis of Individual consideration

Table 5: Regression Analysis of Variance results for Individualized Consideration

Model		Sum of Squares	Degrees of freedom	Mean Square	F	Sig.
1	Regression	94.765	1	94.765	54.743	0.000
	Residual	183.497	106	1.731		
	Total	278.262	107			

Dependent Variable: Integration of ICT

Predictors(constant) Individual consideration

The regression Analysis of Variance (ANOVA) findings displayed in table 5 showed that there is a statistically significant linear relationship between explanatory variable individualized consideration and ICT integration in classroom since the p-value (Sig.=0.00) obtained was less than the level of significance of 0.001 $F(1,106) = 54.743, p < .05$.

Table 6: Regression Coefficients for Individualized Consideration

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	5.380	0.890		6.047	0.000
Individualized Consideration	0.284	0.038	0.584	7.399	0.000

The regression coefficients displayed in table 6 were used to develop a univariate regression model between the explanatory variable individualized consideration and response variable ICT integration in classroom. The model developed illustrated that the explanatory variable individualized consideration statistically and significantly influenced the response variable ICT integration in classroom since its p-Value of 0.00 was less than 0.05 (level of significance). The beta coefficient $\beta = 0.284$ implies that, a unit change in explanatory variable individualized consideration on the model will result to a 0.284 change in the response variable ICT integration in classroom. Thus, the null hypothesis was rejected and the conclusion was that individualized consideration practices has a significant influence on ICT integration in the classroom. The fitted univariate regression model developed was as follows, where IT represents ICT integration and IC represents individualized consideration.

$$IT = 5.380 + 0.284IC$$

DISCUSSION

Following the technological changes reshaping work environments globally, school leadership has embraced transformation by supporting the integration of information communication technology (ICT) in teaching and learning (Pentang, 2021). This study specifically examined how Principal's individual

consideration practices impact the integration of ICT in public secondary schools within Kakamega County Kenya.

The findings reveal that a majority of principals claimed to support teachers by addressing their unique needs when integrating ICT into the classroom, prioritizing individual consideration. Correspondingly, teachers reported that technology facilitated lesson planning, homework allocation, and grading. This echoes the sentiments of Nague's (2011) study, which found that leadership encouragement significantly boosts teachers' motivation to use ICT in classrooms.

A substantial 86% of educators were proactive in creating instructional materials while juggling administrative duties. Approximately 40% leveraged online support or cyber resources, underscoring the importance of digital accessibility, as noted by Mohamed and Imrjan (2014).

While over half (55%) of the respondents were adept at managing and customizing information, many faced technological barriers that hindered curriculum development. This contrasts with Tenai's (2017) findings, where a notable portion of educators struggled with basic computer skills, affecting their capacity to produce multimedia content. Moreover, a Teacher Service Commission survey highlighted that 86.2% of instructors encountered obstacles in technology usage, contributing to a gap in professional competence and affecting educational outcomes (Nyamai & Wanzala 2018; Oduor 2018). Imran (2017) emphasized the critical role of supportive administrators in overcoming these challenges.

Document analysis revealed that school technologists provided in-house training, demonstrating the principals' commitment to addressing teachers' ICT needs. However, teachers seldom sought technical assistance without the principals' approval.

Observation checklist data indicated widespread use of computers and photocopiers across various school zones, including secretarial offices and computer labs. Teachers appreciated the principals' support in accessing ICT tools, facilitated by technicians. Despite claims of Wi-Fi availability, interviews exposed issues with connectivity, often exacerbated by power outages and inclement weather. The study also noted regulated student computer access.

The qualitative data suggests that Kakamega's administrators are attuned to the ICT needs of teachers and are actively supportive. Nevertheless, there is a call for intensified efforts to extend comprehensive support to all educators.

CONCLUSION AND RECOMMENDATIONS

The study has established a clear link between the supportive practices of school principals and the successful integration of ICT in Kenyan public secondary schools, leading to the null hypothesis being refuted. Teachers have positively rated principals who show a genuine concern for their individual needs, particularly in terms of ICT use in education. The statistical analysis, with an R^2 of 0.334 and F-value of 54.743 ($p < .05$), indicates that such individual consideration by principals is a significant factor in teachers' adoption of ICT. In essence, when principals engage in mentoring, encouragement, and technical support, teachers are more likely to effectively use ICT in their classrooms. The study's findings underscore the importance of principal involvement in overcoming technical challenges and fostering professional development in ICT, which has been well-received by teachers and is crucial for enhancing educational outcomes.

Recommendations

The study recommends that Principals should intensify their individual consideration practices by

establishing and promoting ICT mentorship programs, aiding teachers in developing technological competencies.

Moreover, addressing teachers' technical needs should be prioritized, ensuring robust technical support systems. Despite challenges like intermittent Wi-Fi connectivity, principals must guarantee the availability of adequate Wi-Fi and ICT resources to support effective teaching and learning processes.

Additionally, future research should expand to include subcounty and private schools within the region to provide a more comprehensive understanding of the impact of principals' individual consideration practices on ICT integration in education.

Limitations and Future Research

The study's scope was limited to public county schools in Kakamega County, excluding private institutions. Consequently, the results may not be universally applicable. Future research should expand to include subcounty and private schools within the region to provide a more comprehensive understanding of the impact of principals' individual consideration practices on ICT integration in education.

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