

The Idealized Influence of School Principals on Teachers' ICT Integration in Classroom Practice in Kakamega Public Secondary Schools in Kenya.

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ABSTRACT

Although Transformational Leadership has received significant scholarly attention over the past four decades, limited research has examined its individual dimensions in depth, particularly idealized influence. This study investigates the role of idealized influence—a core component of transformational leadership—in shaping the integration of Information and Communication Technology (ICT) in public secondary schools in Kenya. Employing a sequential explanatory mixed-methods design, the research involved 62 school principals selected through census, along with 186 teachers and 372 students chosen via simple random sampling. Data collection methods included the MLQ-structured questionnaire, interviews, document reviews, and checklists. Descriptive statistics were used to outline trends and variable states, while regression analysis provided insights into the relationships between variables. The findings revealed a moderately strong positive correlation between ICT usage in schools and idealized influence ($r = 0.557$, $p < 0.001$). Principals who demonstrated ethical leadership, earned trust, and articulated a compelling vision were more successful in promoting ICT adoption. These results highlight the need to strengthen this leadership attribute through targeted training. The study recommends that educational authorities implement professional development programs to enhance principals' idealized influence capabilities, thereby supporting more effective ICT integration. It also lays the groundwork for future studies to examine how other aspects of transformational leadership, in combination with contextual factors, influence technology use in education.

Keywords: Idealized Influence; Transformational Leadership; ICT Integration; School Leadership; Educational Technology; Kenya; Secondary Education

INTRODUCTION

Despite numerous global reforms and policy initiatives, the integration of Information and Communication Technology (ICT) into classroom instruction remains limited, particularly across sub-Saharan Africa, including Kenya. In response to this persistent challenge, UNESCO launched a competency-based ICT framework in 2018 to guide and empower teachers in effectively incorporating ICT into teaching and learning. Aligning with this global direction, the Kenyan government has enacted several ICT integration policies, notably Sessional Paper No. 1 of 2019 and the National Education Sector Strategic Plan (NESSP) 2018–2022. Both documents position ICT as a critical enabler in cultivating a knowledge-based society in line with Kenya's Vision 2030. As part of broader curriculum reforms initiated in 2017, digital literacy was introduced to equip learners with the skills necessary for success in a competitive global environment. To support this initiative, schools were provisioned with laptops (Wanzala & Nyamai, 2018). Building on these foundational efforts, the Teachers Service

Commission (TSC) developed a localized ICT Competency Framework for Teachers in 2021, aiming to better align teacher professional development with national educational priorities.

These frameworks reflect a growing awareness of ICT's transformative potential in enhancing educational outcomes. Technology not only promotes student engagement through interactive and collaborative learning but also equips teachers with diverse tools for instruction, assessment, and professional growth (Oguguo, Ezechukwu, Nannim, & Offor, 2023). Furthermore, ICT facilitates personalized learning and enables continuous interaction between teachers and students beyond traditional classroom boundaries through digital platforms.

However, realizing the full benefits of ICT integration requires more than the provision of technology and policy guidelines, it also demands strong and effective leadership within schools. Principals, as key instructional leaders, play a pivotal role in shaping the conditions necessary for successful ICT adoption. The literature increasingly identifies the school principal as a critical enabler of ICT integration (Okoth, Kalai, & Okumbe, 2021). Among various leadership styles, transformational leadership, particularly the dimension of idealized influence, has been shown to significantly influence organizational change. Idealized influence refers to leaders who act as ethical role models, fostering trust, commitment, and motivation through their values and behaviors. Such principals can inspire teachers to embrace change, adopt new teaching practices, and overcome resistance. These behavioral attributes are especially critical for the successful implementation of ICT in education (Yamamoto & Yamaguchi, 2019). However, despite growing interest in transformational leadership, empirical research remains limited on how specific dimensions such as idealized influence directly affect ICT adoption at the school level.

In Kenya, and specifically in Kakamega County, the gap between policy intentions and practical implementation remains wide. Despite strong policy commitments and improvements in digital infrastructure, ICT adoption in secondary schools is still inconsistent. Several systemic challenges persist, including overcrowded classrooms due to high student enrollment, which strains infrastructure and resources. According to data from the National Bureau of Statistics captured in the NEMIS system, public secondary schools in the county average 435 students per institution, making it difficult to effectively distribute resources and maintain instructional quality (MOE, 2020). This strain is particularly evident in ICT implementation, where only 41% of school computers are functional, an issue that directly affects teachers' capacity to integrate digital tools into instruction. Additional barriers include inadequate teacher training, insufficient digital devices, unreliable internet connectivity, and weak institutional leadership (Shikomera, 2024).

While many teachers express positive attitudes toward ICT, their efforts are often undermined by these organizational and infrastructural constraints. Resistance among some educators to adopt digital tools further complicates the situation, highlighting the role of human and institutional dynamics in shaping ICT integration (Alzahrani, 2017; Muvango, 2021). These ongoing challenges raise critical concerns about the region's ability to contribute meaningfully to national education and development goals, including Kenya's Vision 2030.

This study therefore investigates the extent to which principals' idealized influence impacts teachers' use of ICT in instructional practice. By examining this relationship, the study seeks to bridge the gap between national policy aspirations and on-the-ground realities, providing practical insights into how school leadership can effectively drive sustainable ICT integration in Kenyan secondary education.

Research hypothesis

H₀₄: There is no relationship between principals idealized to teachers 'and ICT integration in teaching and learning in public secondary schools in Kakamega County.

RELATED LITERATURE REVIEW

Idealized Influence in Transformational Leadership

Idealized influence, a core dimension of transformational leadership, was first conceptualized by Bass (1985) building upon Burns' (1978) foundational theory. It refers to a leader's capacity to act as a role model through

ethical conduct, vision, and exemplary behavior that inspires trust and admiration among followers. Northouse (2019) describes idealized influence as the leader's ability to embody shared values and demonstrate integrity, thereby motivating followers to emulate their example. In educational contexts, this dimension is critical in shaping how school leaders inspire teachers to adopt innovative pedagogical practices such as ICT integration.

Avolio and Bass (1991) emphasize that leaders with idealized influence demonstrate conviction, self-confidence, and moral purpose. These attributes encourage teachers to align with the leader's vision and willingly engage in change processes. Similarly, Paletta, Alivernini, and Manganelli (2017) observed that when school leaders' model effective behaviors, they instill confidence among staff and promote collaborative engagement in ICT-supported instruction. This is consistent with Bandura's (1977) social learning theory, later elaborated in his 2020 work, which posits that individuals learn by observing and imitating role models—a process crucial in educational technology adoption.

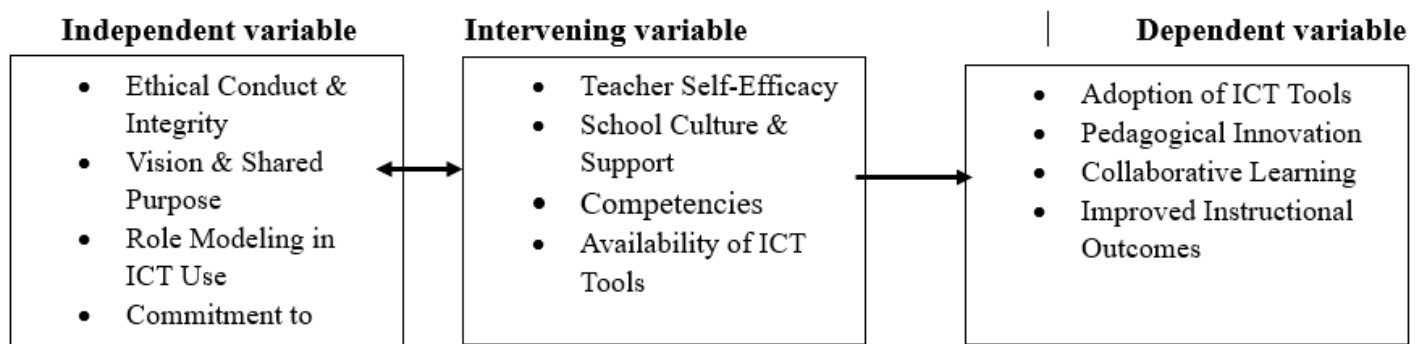


Figure 1 Conceptual Framework

This framework links principals' idealized influence that is one of the components rooted in Bass's (1985) transformational leadership theory to teachers' ICT integration in secondary schools. It highlights how ethical leadership, vision-setting, and ICT modeling by principals foster teacher confidence and motivation. The relationship is mediated by teacher self-efficacy, school culture, competences, and ICT access. Drawing on Bandura's (1977) social learning theory and Fullan's (2020) model of leading in culture change, the framework emphasizes that observable leadership behaviors and a collaborative, innovation-driven school culture are key drivers of sustainable ICT adoption.

Idealized Influence and ICT Integration in Schools

The successful integration of Information and Communication Technology (ICT) in schools depends largely on the leadership style of principals. Transformational leadership, particularly its idealized influence component, plays a vital role in establishing an environment conducive to technological change (Kohli, 2021). Principals who exemplify ethical leadership, articulate a compelling vision, and demonstrate personal engagement with technology foster trust and motivation among teachers (Yamamoto & Yamaguchi, 2019). When school leaders actively use ICT and demonstrate its instructional value, they create a powerful culture of modeling and shared learning (Dexter, 2018).

In this regard, Puspitawati and Ricky (2024) note that transformational principals are instrumental in developing a school vision that integrates modern technology and professional development. They guide teachers through the complexities of technological adoption by embodying digital competence and moral stewardship. This aligns with Fullan's (2007) educational change framework, further expanded in *Leading in a Culture of Change* (Fullan, 2020), which asserts that meaningful school reform occurs when leaders connect vision, capacity building, and moral purpose to inspire collective responsibility.

Empirical Studies on Idealized Influence and ICT Integration

Empirical evidence consistently underscores the positive relationship between transformational leadership and ICT integration. Yamamoto (2021), studying Mongolian primary schools, found that principals' ethical conduct, vision alignment, and proactive technology modeling—hallmarks of idealized influence which significantly

enhanced ICT adoption. Similarly, Afshari (2021) reported that idealized influence mediated the relationship between visionary leadership and workforce dedication, illustrating how ethical modeling promotes commitment to innovation.

In South Africa, Moloi and Bush (2020) revealed that principals demonstrating integrity, commitment, and a clear vision fostered trust and improved teaching outcomes in disadvantaged schools. Their findings suggest that when leaders exemplify moral and professional standards, teachers are more likely to integrate ICT effectively.

In Kenya, Musyoki, Okoth, Kalai, and Okumbe (2021) established that principals who “lead from the front” enhance teacher motivation and learner performance through exemplary behavior. Gacicio (2022) further found that transformational leadership, mediated by school environment and teacher self-efficacy, strongly influenced ICT adoption in Kenyan public schools.

Collectively, these studies affirm that idealized influence functions as both a moral compass and a behavioral catalyst. Principals who visibly demonstrate digital competence and ethical leadership stimulate teachers’ confidence and foster sustained ICT integration.

Research Gaps

The reviewed literature consistently demonstrates that idealized influence—manifested through ethical conduct, role modeling, and visionary leadership—plays a critical role in shaping teachers' willingness to integrate ICT into their instructional practices. Principals who exemplify these traits serve as catalysts for fostering a culture of innovation and technological adoption within schools. Despite these insights, several notable research gaps persist. First, the majority of existing studies have concentrated on primary education or urban settings, leaving secondary schools, particularly those in rural or semi-rural areas such as Kakamega County, underrepresented. This limits the generalizability of findings across diverse educational contexts.

Second, although the positive association between idealized influence and ICT integration is well-established, the specific strategies and leadership practices through which principals enact this influence to encourage technology use among teachers remain insufficiently explored. There is a lack of empirical evidence detailing the practical ways in which school leaders can translate idealized influence into sustained, school-wide ICT adoption.

This study seeks to address these gaps by investigating how principals' idealized influence affects teachers' integration of ICT in teaching and learning within public secondary schools in Kakamega County, Kenya. By focusing on a less-studied educational level and geographical context, this research contributes to a more nuanced understanding of transformational leadership's role in educational technology integration.

RESEARCH METHODOLOGY

This study employed a mixed-methods research design using an explanatory sequential approach. In this two-phase process, quantitative data were collected first to identify general patterns, followed by qualitative data to explore underlying reasons for those patterns (Creswell & Plano Clark, 2011; Robson & McCartan, 2016). The qualitative component involved collecting non-numerical data through open-ended questionnaires and interviews to gain in-depth insight into the phenomenon (Orodho, 2016). In contrast, the quantitative component focused on collecting measurable data. Integrating both methods allowed for a comprehensive understanding of the research problem by offsetting the limitations of each approach and leveraging their respective strengths (Creswell & Plano Clark, 2011; Cheruse, Ngeno, & Kaptingei, 2020).

Population and Sampling

Target Population

The study focused on 69 public secondary schools in Kakamega County. The target population included principals, teachers, and Form Three students, totaling 6,290 respondents.

Sample Size and Sampling Techniques

A total of 621 respondents were selected for the main study using a combination of purposive and random sampling techniques. The sample was composed of the following:

- 62 principals – selected through purposive sampling
- 1 Quality Assurance Officer – selected through purposive sampling
- 186 teachers – determined using Slovin's formula and selected through simple random sampling
- 372 Form Three students – determined using Slovin's formula and selected through simple random sampling

Pilot Study

A preliminary test of the research instruments was carried out in seven schools that were not part of the main study sample. The researcher conducted interviews with seven principals, distributed transformational leadership influence questionnaires to 21 teachers, and selected six students to complete a survey assessing the integration of ICT in curriculum instruction. As suggested by Hertzog (2008), a sample size of 10 to 40 participants is adequate for pilot testing; the total of 32 participants in this study aligns with that recommendation. The primary objective of the pilot study was to evaluate the validity and reliability of the research tools before proceeding with the main study. Prior to conducting the pilot, expert input was sought from specialists in the Department of Policy and Curriculum Studies to provide judgment on the appropriateness of the instruments. To assess reliability, the test-retest method was employed, resulting in a Pearson correlation coefficient of 0.75.

Research Instruments

The study utilized multiple instruments to collect data, including questionnaires, interview guides, observation checklists, and document analysis.

Questionnaires

To assess leadership traits, the study employed the Multifactor Leadership Questionnaire (MLQ) Form 5, a widely recognized tool in organizational research where leadership outcomes are measured (Bass & Avolio, 1995). The MLQ was chosen for its ability to evaluate various aspects of transformational leadership, including idealized influence, individualized consideration, intellectual stimulation, and inspirational motivation—traits relevant to the integration of ICT in teaching and learning.

Interview Guides

During the qualitative phase, interviews were conducted with selected respondents who consented to participate. These included school principals and the County Quality Assurance and Standards Officer (CQUASO). Interviews provided insights into leadership influence on ICT integration in schools. According to Creswell (2014), post-positivist paradigms emphasize observable and measurable knowledge, making interviews a suitable method for exploring individual behaviors. The tool allowed the researcher to guide the conversation, probe responses, and clarify issues as necessary (Mugenda & Mugenda, 2012).

Observation Checklist

An observation checklist was used to assess the presence and functionality of ICT infrastructure within schools. As Kothari (2004) notes, observation is a valuable method for collecting data on actual behaviors and conditions in natural settings. This tool helped the researcher confirm the availability and operational status of digital tools in classrooms.

Document Analysis

Document analysis was used as a cost-effective qualitative method to examine relevant records and policies (Corbin & Strauss, 2008). The analysis focused on school ICT policy documents, Kenya Certificate of Secondary Education (KCSE) results, and classroom attendance records, offering contextual information related to ICT integration in education.

Instrument Validity and Reliability

To ensure content validity, the research instruments were reviewed by Kenyatta University supervisors and educational specialists. Their expert judgment helped verify that each tool appropriately measured the intended variables. Reliability of the instruments was established using Pearson's correlation formula, with a coefficient threshold of 0.7 considered acceptable for all instruments.

Data Collection and Analysis Procedures

Data collection employed both quantitative and qualitative approaches. Quantitative data was analyzed using the Statistical Package for Social Sciences (SPSS) version 25.0. Descriptive statistics (frequencies, percentages, means, and standard deviations) provided summaries of respondents' characteristics and key variables, while inferential statistics (Pearson correlation and regression analysis) were used to test the hypothesis regarding the relationship between principals' idealized influence and ICT integration.

Qualitative data from interviews and open-ended questions was analyzed thematically through coding, categorization, and pattern identification. Triangulation of both quantitative and qualitative data strengthened the validity of the findings and provided a more comprehensive understanding of the research problem.

Ethical Considerations

The study adhered to ethical research principles by obtaining necessary permits from relevant authorities, including the National Commission for Science, Technology and Innovation (NACOSTI). Informed consent was sought from all participants, confidentiality was maintained throughout the research process, and participation was voluntary.

FINDINGS AND DISCUSSIONS

This section presents both descriptive and inferential statistical analyses related to the study objectives. It explores principals' self-perceptions of their idealized influence as a component of transformational leadership and compares these with teachers' perceptions of the same construct. Respondents' views were collected using a structured five-point Likert scale instrument, ranging from 1 = Strongly Disagree to 5 = Strongly Agree. The results are organized into thematic tables, including descriptive statistics, hypothesis testing summaries, correlation matrices, and ANOVA outputs. These findings provide a comprehensive understanding of how idealized influence manifests in school leadership and its relationship with teachers' adoption of ICT in instructional practices.

Table 4.1 Principals' Idealized influence Responses for ICT intergration.

Items’	Responses										Mean	Std. Dev
	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree			
	n	%	n	%	n	%	n	%	n	%		
Use ICT tools during my lessons and demonstrate exemplary	0	0	0	0	30	55.6	19	35.2	5	9.3	3.54	0.665

management skills for learners' success.												
Communicate to teachers regularly and encourage them to embrace teamwork	0	0	1	1.9	23	42.6	26	48.1	4	7.4	3.61	0.656
Handle matters concerning ICT ethically by promoting moral values in the learning environment.	0	0	2	3.7	21	38.9	25	46.3	6	11.1	3.64	0.731
Promote collaborative learning that encourages teachers to share their skills in using ICT.	0	0	0	0	10	18.5	39	72.2	5	9.3	3.91	0.524

The results in Table 4.1 relate to principals' perceptions of the dimension of Idealized Influence.

Principals show varying levels of engagement in ICT-related leadership. Regarding the use of ICT tools and exemplary management skills, 55.6% were neutral, 35.2% agreed, and 9.3% strongly agreed, suggesting a need for further emphasis. In terms of regular communication and teamwork encouragement, 42.6% were neutral, while 48.1% agreed, reflecting a generally positive approach to collaboration. Ethical handling of ICT was viewed favorably, with 46.3% agreeing, 38.9% neutral, and 11.1% strongly agreeing, indicating awareness of moral standards in digital learning. The strongest support was seen for fostering collaborative learning among teachers, with 72.2% agreeing, 18.5% neutral, and 9.3% strongly agreeing, highlighting a high level of commitment to peer learning and professional growth in ICT use.

In summary, the findings indicate that principals generally exhibit characteristics of idealized influence—an essential component of transformational leadership—through their efforts to promote ethical practices, collaboration, and ICT-related instructional support. However, the moderate levels of agreement in some areas, particularly in modeling ICT use, highlight the need for strengthened leadership development. These results underscore the importance of idealized influence in shaping school culture and advancing meaningful ICT integration, aligning with transformational leadership's emphasis on visionary, ethical, and exemplary behavior that motivates staff toward shared institutional goals.

Table 4.2: Teachers Responses on Principals' Idealized influence for ICT intergration.

Items’	Responses										Mean	Std. Dev
	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree			
	n	%	n	%	n	%	n	%	n	%		
Principal handles our requests concerning ICT tools ethically.	0	0	2	1.5	91	68.9	34	25.8	5	3.8	3.32	0.571
The principal develops slides and projects her work during her lessons.	3	2.3	2	1.5	112	84.8	11	8.3	4	3	3.08	0.553

The Principal provides a model of collaborative learning with students and teaching staff.	2	1.5	0	0	88	66.7	37	28	5	3.8	3.33	0.624
Communicate to teachers regularly and encourage them to embrace teamwork	3	2.3	0	0	88	66.7	37	28	5	3.8	3.33	0.624

Table 4.2 presents data on teachers' perceptions regarding principals' behaviors aligned with the dimension of idealized influence.

Teachers show mixed perceptions regarding principals' engagement with ICT. On ethical handling of ICT requests, 68.9% remained neutral, while 25.8% agreed, reflecting general confidence but also some lack of clear commitment. When asked about principals developing slides and project work during lessons, 84.8% were neutral, with only 8.3% agreeing and 3% strongly agreeing, suggesting limited direct engagement in instructional ICT use. Regarding communication and collaboration, 66.7% were neutral, and 28% agreed, indicating moderate efforts to promote teamwork in ICT practices. Similarly, when asked about modeling collaborative learning, 66.7% remained neutral, 28% agreed, and only 3.8% strongly agreed, pointing to potential gaps in visibility and influence. Overall, while ethical ICT leadership is acknowledged, active modeling of digital collaboration appears limited.

Qualitative insights from follow-up interviews helped contextualize these findings. Teachers emphasized that while their principals handle concerns ethically—especially regarding ICT-related challenges like connectivity and resource availability—there is minimal direct interaction with the principal regarding instructional matters. One teacher noted:

“In our school, we have no issues with the way our principal handles our concerns... the Academic Master usually handles them. We only see the principal during routine class checks or staff meetings.”

Another teacher highlighted procedural efficiency but noted logistical setbacks:

“The principal handles our concerns effectively, especially network and e-resource issues. We are always informed. However, collecting projectors from the secretary cuts into my lesson time.”

Regarding the modeling of ICT tools, a teacher added:

“Although the principal never misses the timetable, they've not been observed using slides while teaching. Their office has a computer for admin work, but for lessons, they use notes.”

In addition to the quantitative findings, focus group discussions with students highlighted critical challenges affecting ICT integration at the classroom level. A recurring concern was limited access to ICT resources due to scheduling constraints and insufficient time allocation. As one student explained:

“Although we have access to the computer lab at our school, the time allotted for us to use the resources is not sufficient, making it difficult for us to complete our assignments.”

Students also raised issues related to technical infrastructure, particularly unreliable internet connectivity. This significantly hindered their ability to utilize digital tools effectively:

“While we can access the computer lab, the network issues are a significant challenge, preventing us from utilizing the resources effectively.”

These qualitative insights align with the survey findings that showed low levels of ICT integration and highlight the practical barriers that persist, even in schools where basic infrastructure exists. They further reinforce the

need for strong leadership to not only provide infrastructure but also to address logistical and technical challenges through planning, resource allocation, and stakeholder coordination.

These responses align with findings by Muia (2018), who noted that a principal's demonstration of ethical and transformational leadership—including idealized influence—can build trust, shape organizational goals, and affect teaching outcomes. Similarly, Gyansah (2020) and Ogola (2017) emphasize the importance of ethical values such as accountability and commitment in fostering a supportive environment for ICT integration. Without principals modeling these practices during implementation, teachers may lack the support and inspiration needed to engage with digital tools effectively. As Kitur (2019) recommended, adopting and demonstrating idealized influence is essential for improving both ICT integration and academic performance, particularly by promoting innovation and creativity in instruction.

Inferential statistics

Table 4.3: Correlation Analysis : Principal's Idealized Influence and ICT Integration

	ICT Integration in Classroom	Idealized Influence
ICT Integration in Classroom	1	
Idealized Influence	.557**	1
N	.000 108	108
** Correlation is significant at the 0.01 level (2-tailed)		

Drawing from the results shown in Table 4.3, principals' idealized influence demonstrates a moderate positive relationship with classroom ICT integration ($r(108) = 0.557, p < 0.001$).

Regression Analysis for Idealized Influence

Regression analysis was conducted to assess whether the predictor variable—idealized influence—significantly predicts the dependent variable, ICT integration in classroom practice. Following Cohen's (1988) effect size benchmarks, correlation strength was interpreted as strong (0.50–1.0), moderate (0.30–0.49), and weak (0.10–0.29). The analysis also examined the proportion of variance in ICT integration explained by idealized influence. The summarized results are presented in Table 4.34.

Table 4.4: ANOVA Summary for Idealized Influence

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.557	0.310	0.304	1.34539

Regression analysis results (Table 4.4) indicate a moderate positive relationship between principals' idealized influence and ICT integration in teaching ($R = 0.557$). The model explains 31% of the variance in ICT use ($R^2 = 0.310$), suggesting that leadership style significantly contributes to technology adoption. The remaining 69% of unexplained variance points to the influence of other contextual and systemic factors, warranting further investigation.

Table 4.5: Idealized Influence predictive Model

Model	Sum of Squares	Degrees of freedom	Mean Square	F	Sig.
1 Regression	86.393	1	86.393	47.729	0.000

Residual	191.869	106	1.810		
Total	278.262	107			

Dependent Variable: Integration of ICT

Predictors(constant) Idealized influence

ANOVA results (Table 4.5) confirmed a significant linear relationship between principals' idealized influence and ICT integration in classrooms, $F(1, 106) = 47.729$, $p < .001$. The extremely low p-value indicates a negligible likelihood that the observed relationship occurred by chance. Consequently, the null hypothesis was rejected, affirming that principals' idealized influence is a significant predictor of ICT adoption in instructional settings.

Table 4.6: Predictive Values for Idealized Influence components'

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	6.219	0.832		7.476	0.000
Idealized Influence	0.239	0.035	0.557	6.909	0.000

Regression analysis (Table 4.6) revealed a statistically significant relationship between principals' idealized influence and ICT integration in classroom settings ($\beta = 0.239$, $p < .001$). This suggests that a one-unit increase in idealized influence results in a 0.239 unit increase in ICT integration, controlling for other variables. The resulting univariate regression model— $IT = 6.219 + 0.239(II)$ —emphasizes the practical impact of leadership on technology adoption in education.

These findings align with prior studies. For instance, Gyansah (2021) found a moderate correlation ($r = 0.248$) between idealized influence and student achievement in Ghanaian schools, highlighting ethical leadership as a driver of innovation. Similarly, Kitur et al. (2019) linked principals' Idealized Influence to improved KCSE performance in Kenya, while Muia (2018) emphasized the role of headteachers as ethical role models in driving student outcomes.

Collectively, the evidence underscores the pivotal role of idealized influence in shaping ICT integration in public secondary schools, particularly in Kakamega County.

DISCUSSION

The present study found a significant yet modest correlation ($R = 0.557$, $p < .001$) between principals' idealized influence and ICT integration in government-sponsored secondary schools in Kakamega County. This indicates that while transformational leadership behaviors exist, they are inconsistently practiced. Teachers' neutral responses regarding principals' visible use of ICT, such as preparing digital slides or projecting instructional content, suggest limited role modeling — an essential aspect of idealized influence (Bass & Riggio, 2006).

The findings align with Bandura's social learning theory (1977), which posits that individuals learn behaviors through observation and imitation of credible models. When principals fail to visibly engage in ICT practices, teachers are deprived of concrete examples to emulate, reducing the likelihood of adoption. Conversely, Fullan's educational change framework (2007) highlights the importance of moral purpose and capacity building — both linked to idealized influence — in sustaining technological reform. Principals who model ethical ICT use and provide professional development establish both the moral and technical foundations for change.

Similar to findings by Gyansah (2021) and Kitur et al. (2019), this study revealed that principals' ethical credibility positively affects teacher motivation to integrate ICT. However, contextual barriers—such as equipment theft, unreliable electricity, and teacher resistance—limit the manifestation of idealized influence. The term “Technosafi,” used by some teachers to describe ICT as a tool for “experts only,” underscores the cultural and psychological barriers to adoption, which strong leadership modeling could mitigate.

Thus, while statistical evidence supports the significance of idealized influence, practical implementation remains weak. Principals often espouse ICT integration rhetorically but fail to exemplify it behaviorally. According to Ogolla (2017) and Muiia (2018), leadership credibility is derived from visible actions rather than directives. Therefore, the modest correlation found may reflect a leadership gap between vision articulation and practice enactment. Strengthening this link could enhance transformational influence, build teacher confidence, and institutionalize ICT integration more effectively.

CONCLUSION

The study concludes that principals' idealized influence plays a significant yet underutilized role in promoting ICT integration in secondary schools. While most principals display ethical professionalism, few actively model ICT use, leading to limited teacher engagement with digital tools. This gap weakens the transformational impact of school leadership and slows the pace of educational technology adoption.

Effective digital transformation requires principals to go beyond administrative oversight and exemplify the practices they promote. Idealized influence—anchored in ethical integrity, vision, and practical modeling—remains a critical leadership dimension for advancing ICT-driven teaching and learning.

RECOMMENDATIONS

Capacity Building for Principals: Provide targeted training programs to equip school leaders with practical ICT skills and strategies for modeling technology use.

Visibility in Practice: Encourage principals to actively demonstrate ICT integration during instruction to inspire and guide teachers.

Collaborative Culture: Foster a culture of teamwork where principals regularly engage teachers in decision-making and technology planning.

Policy Implications

Leadership Development Framework: The Ministry of Education should integrate transformational leadership components, including idealized influence, into the national school leadership training curriculum.

ICT Accountability Mechanisms: Policies should mandate regular monitoring and reporting on ICT usage by school leadership to ensure alignment between strategy and practice.

Infrastructure Security Support: Strengthen policy measures for ICT equipment safety to reduce theft and resource loss, which undermine integration efforts.

Suggestions for Future Studies

Subsequent studies should examine the mediating role of school culture and teacher self-efficacy in the relationship between idealized influence and ICT integration, in high schools.

Investigate variations in the relationship between idealized influence and ICT integration across different school categories (national, county, sub-county) and geographical contexts.

Explore the relationship between principals' idealized influence, teacher ICT integration, and ultimate student learning outcomes to establish a more comprehensive understanding of the impact chain.

Limitations of the Study

This study focused exclusively on public county schools in Kakamega County, thereby excluding private and sub-county institutions. As a result, the findings may not be fully generalizable across all educational settings. Future research should incorporate a broader sample, including private and sub-county schools, to capture a more comprehensive understanding of how principals' idealized influence impacts ICT integration.

Additionally, the study relied heavily on self-reported data from principals and teachers, which may be subject to social desirability bias or inaccuracies in personal perception. The limited use of classroom observations or objective performance data might have constrained the ability to fully validate reported practices.

The study's cross-sectional design also limits the ability to infer causality between leadership behaviors and ICT integration outcomes. Longitudinal studies would be more effective in tracking changes over time and establishing stronger causal relationships.

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