

**The Effect Of E-Learning Platforms On Teachers' Teaching Practices In Secondary Schools: A Case Study  
Of Kiziranfumbi Secondary School**

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**Abstract**

The integration of e-learning platforms into secondary school instruction has been widely promoted as a means of enriching teaching practice, yet the extent to which teachers actually change how they plan, deliver, and assess lessons following the introduction of such platforms remains an empirical question that varies considerably across school contexts. This study examined the effect of e-learning platforms on teachers' teaching practices in secondary schools, using Kiziranfumbi Secondary School as a case study, guided by objectives that sought to establish the level of teachers' adoption and use of the e-learning platform, assess changes in teaching practices associated with platform use, determine the relationship between e-learning platform use and teaching practices, and identify the challenges teachers face in integrating the platform into their instructional practice. A descriptive correlational research design combining quantitative and qualitative approaches was adopted, with data collected from a sample of 58 respondents comprising teachers, the head teacher, and the director of studies, using questionnaires, interviews, and lesson observation. Data were analyzed using descriptive statistics, Pearson correlation, multiple regression, and path analysis (AMOS). Results showed moderate-to-high adoption of the e-learning platform for lesson preparation and delivery (mean = 3.64) and a significant positive correlation between platform use and teaching practices ( $r = 0.601$ ,  $p < 0.01$ ). Regression analysis showed that platform use and teacher ICT competence jointly explained 45.2 percent of the variance in teaching practices ( $R^2 = 0.452$ ). Path analysis revealed that teacher ICT competence significantly mediates the relationship between e-learning platform use and teaching practices, with a significant indirect effect ( $\beta = 0.238$ ,  $p < 0.01$ ) alongside a significant direct effect ( $\beta = 0.329$ ,  $p < 0.01$ ), yielding a total effect of 0.567. The study concludes that e-learning platform use has meaningfully, though moderately, influenced teaching practices at Kiziranfumbi Secondary School, operating both directly and through its effect on teachers' ICT competence, and recommends targeted ICT skills training for teachers, improved access to functional devices and internet connectivity, and continuous pedagogical support for integrating e-learning tools into classroom practice.

**Keywords: E-learning platforms, teaching practices, ICT competence, secondary schools, technology integration, path analysis, Kiziranfumbi Secondary School**

**Introduction**

The global shift towards digital transformation in education has positioned e-learning platforms, defined as web-based or software-based systems that support the creation, delivery, and management of instructional content and learning activities, as an increasingly important complement to traditional face-to-face teaching in secondary schools (Julius, 2025). E-learning platforms typically offer features such as digital lesson repositories, interactive assessment tools, discussion forums, multimedia content delivery, and tools for tracking student progress, all of which hold the potential

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to influence how teachers plan lessons, deliver instruction, engage students, and assess learning outcomes (Julius & Kaazara, 2025). In Uganda, the adoption of e-learning platforms in secondary schools accelerated notably following the COVID-19 pandemic-induced school closures, during which the Ministry of Education and Sports and various development partners promoted digital learning platforms as a means of maintaining educational continuity, and many schools that had not previously used such tools were compelled to adopt them, at least temporarily, with varying degrees of subsequent sustained use once schools reopened for in-person instruction (Julius, Kazaara, et al., 2026). Kiziranfumbi Secondary School, located in Kikuube District in Western Uganda, is among the secondary schools that adopted an e-learning platform during this period and has continued to use it to a varying extent in the years since, providing a relevant setting in which to examine, at the level of an individual school, how the sustained availability of an e-learning platform has actually influenced the day-to-day teaching practices of its teaching staff, moving beyond the general policy narrative of digital transformation to an empirical, classroom-level assessment of change (Nicholas & Nancy, 2024).

This study is motivated by the recognition that while considerable attention has been paid at the national policy level to the rollout of digital learning infrastructure and platforms in Uganda's secondary education system, comparatively less empirical attention has been directed at understanding, within specific school contexts, the extent to which the availability of such platforms translates into genuine changes in teachers' instructional practices, as opposed to superficial or inconsistent use that leaves core teaching methods largely unchanged (Julius, 2024). Teaching practices, understood here to encompass lesson planning approaches, instructional delivery methods, student engagement strategies, and assessment practices, are shaped by a complex interplay of factors including teachers' pedagogical beliefs, their level of comfort and competence with digital tools, the adequacy of supporting infrastructure such as devices and internet connectivity, and the broader school culture surrounding technology use, all of which may either facilitate or constrain the translation of e-learning platform availability into meaningful pedagogical change (A. I. Kazaara & Desire, 2025). By focusing specifically on Kiziranfumbi Secondary School, this study seeks to generate a grounded, contextually rich understanding of how e-learning platform use has shaped teaching practices within this particular school, with the broader aim of contributing evidence that can inform both school-level strategies for maximizing the instructional benefits of e-learning platforms and wider policy discussions regarding effective digital learning integration in Uganda's secondary schools (Julius, Rosebell, et al., 2026).

#### **Problem Statement**

Despite the introduction and continued availability of an e-learning platform at Kiziranfumbi Secondary School since the COVID-19 period, school administrators have observed considerable variation among teaching staff in the extent to which the platform has been incorporated into regular teaching practice, with some teachers reportedly making active and sustained use of the platform's lesson planning, content delivery, and assessment features, while others have reverted largely to traditional, non-digital teaching methods once the acute conditions necessitating platform use

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during school closures subsided (A. G. Kazaara & Kazaara, 2025). This variation raises important questions regarding the actual, sustained effect of e-learning platform availability on teaching practices at the school, given that the mere provision of a digital platform does not, by itself, guarantee that teachers will meaningfully integrate it into their pedagogical approach in ways that could be expected to improve instructional quality (Julius & Audrey, 2026). School administrators and education stakeholders have expressed particular concern that without a clear understanding of the specific factors that explain why some teachers have sustained meaningful e-learning platform use while others have not, opportunities to maximize the instructional benefits of the existing platform investment, as well as to design effective support interventions for teachers who continue to underutilize it, are likely to be missed (Kaazara & Nancy, 2025). However, there is a scarcity of rigorous, school-specific empirical research examining the actual effect of e-learning platform use on teaching practices at Kiziranfumbi Secondary School, as well as the role that factors such as teachers' ICT competence may play in explaining variation in this effect, meaning that school leadership currently lacks a solid evidence base upon which to design targeted interventions to improve e-learning integration among its teaching staff (Anghelo Josué et al., 2023). This study addresses this gap by systematically investigating the effect of e-learning platform use on teachers' teaching practices at Kiziranfumbi Secondary School.

### **Main Objective**

The main objective of this study is to examine the effect of e-learning platforms on teachers' teaching practices in secondary schools, with specific reference to Kiziranfumbi Secondary School.

### **Specific Objectives**

The study is guided by the following specific objectives: to establish the level of teachers' adoption and use of the e-learning platform at Kiziranfumbi Secondary School; to assess the changes in teaching practices, including lesson planning, instructional delivery, and assessment, associated with e-learning platform use; to determine the relationship between e-learning platform use and teachers' teaching practices, taking into account the role of teacher ICT competence; and fourth, to identify the key challenges teachers face in integrating the e-learning platform into their instructional practice, and to recommend measures for enhancing this integration.

### **Literature Review**

This study draws theoretically on the Technology Acceptance Model, which explains the adoption and sustained use of information technology in terms of users' perceptions of its usefulness and ease of use, providing a useful lens for understanding why some teachers at Kiziranfumbi Secondary School have sustained active engagement with the e-learning platform while others have not, depending on their perceptions of its instructional value relative to the effort required to use it (Inuwa et al., 2017). This is complemented by the Technological Pedagogical Content Knowledge (TPACK) framework, which conceptualizes effective technology integration in teaching as requiring the intersection of technological knowledge, pedagogical knowledge, and content knowledge, suggesting that teachers' ability to translate e-learning platform availability into genuinely improved teaching practice depends not merely on their technical familiarity with the platform but on their capacity to meaningfully integrate it with sound pedagogical

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approaches specific to their subject content(Julius & Nancy, 2025). Diffusion of innovation theory further contributes to the study's theoretical framing by explaining the commonly observed pattern in which a subset of "early adopter" teachers embrace and sustain use of new instructional technologies considerably more readily and extensively than their colleagues, a pattern that appears consistent with the variation in sustained e-learning platform use observed among teachers at Kiziranfumbi Secondary School following the initial COVID-19-driven adoption period(Anthony et al., 2023).

Empirical studies on e-learning adoption and teaching practice in Sub-Saharan African secondary schools have generally found that while the provision of e-learning platforms and associated infrastructure can meaningfully expand the instructional resources available to teachers, the actual translation of this availability into changed teaching practice is strongly moderated by teachers' digital competence and confidence, with numerous studies documenting that teachers with stronger ICT skills report more substantial changes in lesson planning, content delivery, and assessment practices following e-learning platform introduction than their less digitally competent colleagues(Julius, Kazaara, et al., 2026). Studies conducted within the Ugandan secondary education context, particularly those examining the post-COVID-19 digital learning landscape, have similarly found that many schools experienced an initial surge in e-learning platform use during the period of school closures, followed by a marked decline in sustained use once in-person instruction resumed, a pattern attributed variously to infrastructural constraints such as unreliable internet connectivity and limited device access, insufficient ongoing technical and pedagogical support for teachers, and a persistent perception among some teachers that e-learning tools are more burdensome to prepare than traditional teaching materials. Other studies have specifically examined the mediating role of teacher ICT competence in the relationship between e-learning platform access and instructional practice change, generally finding that ICT competence functions as a significant intervening variable, such that the instructional benefits of e-learning platform availability are substantially realized only among teachers who possess sufficient technical skill and confidence to move beyond basic platform navigation towards more sophisticated pedagogical uses such as interactive assessment design and differentiated content delivery, a finding that provides the empirical basis for the mediation model examined in the present study(Nelson, 2024).

### **Methodology**

This study adopted a descriptive correlational research design employing a mixed-methods approach, combining quantitative survey data with qualitative interview and lesson observation data, in order to comprehensively examine the effect of e-learning platform use on teaching practices at Kiziranfumbi Secondary School(A. Nafiu et al., 2012). Given that the study focused on a single school, the target population comprised the entire teaching staff of the school, together with the head teacher and director of studies, from which a total sample of 58 respondents, representing the full complement of 55 teaching staff plus the head teacher and director of studies, was targeted, with data collection

conducted as a near-census of the school's teaching personnel rather than a sampled subset, given the manageable size of the population(Abiodun et al., 2022).

Data collection was conducted using structured questionnaires administered to teaching staff, designed to capture information on the extent and nature of their e-learning platform use, their self-assessed ICT competence, and their perceptions of associated changes in their lesson planning, instructional delivery, and assessment practices, complemented by semi-structured interview guides used to conduct in-depth interviews with the head teacher and director of studies regarding school-level patterns of platform adoption and observed changes in teaching practice among staff(Nafiu et al., 2017). In addition, structured lesson observation was conducted for a purposively selected subsample of 15 teachers, comprising a mix of more frequent and less frequent platform users identified through the survey, using a standardized observation checklist to independently assess the extent to which digital tools and e-learning-derived materials were incorporated into actual classroom instruction, providing an objective, non-self-reported source of data on teaching practice that could be triangulated against self-reported survey responses. The validity of the questionnaire and observation instruments was established through expert review and pilot testing, while reliability was assessed using Cronbach's alpha, with all constructs returning coefficients above the acceptable threshold of 0.7. Quantitative data were analyzed in SPSS version 26 using descriptive statistics to characterize platform use, ICT competence, and teaching practice patterns among respondents, and using Pearson correlation and multiple regression analysis to examine the relationship between e-learning platform use and teaching practices(Nelson et al., 2022). A path model was further estimated in AMOS to test the hypothesized mediating role of teacher ICT competence in the relationship between platform use and teaching practices, generating standardized path coefficients for direct and indirect effects. Qualitative data obtained from interviews and lesson observation notes were analyzed thematically and used to enrich and contextualize the quantitative findings. Ethical clearance was obtained from the relevant university and school authorities prior to data collection, and informed consent was obtained from all respondents, with confidentiality of individual responses strictly maintained throughout the study.

## **Results**

### **Response Rate**

Of the 58 questionnaires administered, 53 were correctly filled and returned, giving a response rate of 91.4 percent, supplemented by two key informant interviews and 15 structured lesson observations, all deemed adequate for analysis.

### **Descriptive Statistics**

#### **Demographic Characteristics of Respondents**

**Table 1: Demographic Characteristics of Respondents (n = 53)**

| Characteristic | Category | Frequency | Percent (%) |
|----------------|----------|-----------|-------------|
|----------------|----------|-----------|-------------|

|                             |                   |    |      |
|-----------------------------|-------------------|----|------|
| Gender                      | Male              | 31 | 58.5 |
|                             | Female            | 22 | 41.5 |
| Teaching experience         | Less than 5 years | 14 | 26.4 |
|                             | 5–10 years        | 24 | 45.3 |
|                             | Above 10 years    | 15 | 28.3 |
| Subject area                | Sciences          | 19 | 35.8 |
|                             | Humanities        | 20 | 37.7 |
|                             | Languages         | 14 | 26.4 |
| Prior ICT training received | Yes               | 29 | 54.7 |
|                             | No                | 24 | 45.3 |

**Source: Primary Data, 2025**

Table 1 presented the demographic characteristics of the 53 respondents who participated in the study. The findings indicated that 31 (58.5%) respondents were male, while 22 (41.5%) were female. This showed that male respondents constituted a slightly larger proportion of the sample than female respondents. However, the representation of female respondents was also substantial, suggesting that the study captured views from both male and female teachers. The relatively balanced representation of the two genders enhanced the diversity of perspectives regarding e-learning platform use, ICT competence, and teaching practices.

In terms of teaching experience, the findings showed that 24 (45.3%) respondents had between 5 and 10 years of teaching experience, representing the largest proportion. This was followed by 15 (28.3%) respondents who had more than 10 years of teaching experience, while 14 (26.4%) had less than 5 years of experience. The results therefore indicated that most respondents had considerable teaching experience, with 73.6% having at least five years of teaching experience. This suggested that the majority of respondents had sufficient professional exposure to provide informed views on the use of e-learning platforms and the integration of ICT into teaching.

Regarding subject area, the results indicated that 20 (37.7%) respondents taught Humanities, 19 (35.8%) taught Sciences, and 14 (26.4%) taught Languages. Humanities teachers therefore constituted the largest group, although the differences across the three subject areas were relatively small. The representation of teachers from different subject areas was important because the use of e-learning platforms and ICT-based teaching practices could vary according to the nature of subjects taught. The findings therefore provided a broad representation of teaching experiences across different academic disciplines.

The findings further showed that 29 (54.7%) respondents had previously received ICT training, while 24 (45.3%) had not received prior ICT training. Although more than half of the respondents had received ICT training, a considerable proportion had not. This finding suggested that teachers' levels of exposure to ICT-related training were not uniform. The presence of respondents without prior ICT training could have implications for their confidence, competence, and ability to effectively utilize e-learning platforms in teaching and assessment.

**Descriptive Statistics for Study Constructs****Table 2: Descriptive Statistics of E-Learning Platform Use, ICT Competence, and Teaching Practices (5-point Likert scale)**

| Construct               | Indicator                                       | Mean | Std. Dev. | Interpretation |
|-------------------------|-------------------------------------------------|------|-----------|----------------|
| E-learning platform use | Use of platform for lesson preparation          | 3.71 | 0.84      | High           |
|                         | Use of platform for student assessment          | 3.42 | 0.97      | Moderate–High  |
|                         | Overall platform use index                      | 3.64 | 0.85      | Moderate–High  |
| Teacher ICT competence  | Confidence navigating platform features         | 3.55 | 0.91      | High           |
|                         | Overall ICT competence index                    | 3.48 | 0.88      | Moderate–High  |
| Teaching practices      | Use of varied/interactive instructional methods | 3.60 | 0.83      | High           |
|                         | Use of digital tools for assessment/feedback    | 3.28 | 0.95      | Moderate       |
|                         | Overall teaching practices index                | 3.49 | 0.82      | Moderate–High  |

Source: Primary Data, 2025

Table 2 presented the descriptive statistics for e-learning platform use, teacher ICT competence, and teaching practices based on a five-point Likert scale. The results showed that the respondents generally reported moderate-to-high levels of e-learning platform use, ICT competence, and teaching practices. This indicated that the use of digital technologies had been incorporated into teaching to a considerable extent, although some areas still demonstrated room for improvement.

For e-learning platform use, the use of the platform for lesson preparation recorded a mean of 3.71 (SD = 0.84), which was interpreted as high. This indicated that respondents had frequently used the e-learning platform to support lesson preparation (A. G. Kazaara & Kazaara, 2025). The relatively low standard deviation suggested that responses were reasonably concentrated around the mean, meaning that teachers generally reported similar levels of platform use for this purpose. On the other hand, the use of the platform for student assessment recorded a mean of 3.42 (SD = 0.97), interpreted as moderate–high. This showed that although teachers had used the platform for assessment, its application in this area was somewhat lower than its use for lesson preparation (Paul et al., 2022). Overall, the e-learning platform use index recorded a mean of 3.64 (SD = 0.85), interpreted as moderate–high, demonstrating that respondents had generally made substantial use of e-learning platforms in their teaching activities.

With respect to teacher ICT competence, confidence in navigating platform features recorded a mean of 3.55 (SD = 0.91), which was interpreted as high. This suggested that respondents generally felt confident in operating and navigating the various features of the e-learning platform. The overall ICT competence index recorded a mean of 3.48 (SD = 0.88), interpreted as moderate–high(Christopher et al., 2022). The finding indicated that teachers generally possessed a satisfactory level of ICT competence, although the level was not uniformly high across all respondents. This was consistent with the demographic finding that 45.3% of respondents had not received prior ICT training, suggesting that continued training and capacity building could further strengthen teachers' ICT competence.

For teaching practices, the use of varied and interactive instructional methods recorded a mean of 3.60 (SD = 0.83), interpreted as high. This suggested that teachers had relatively frequently employed diverse and interactive approaches in their teaching. However, the use of digital tools for assessment and feedback recorded a lower mean of 3.28 (SD = 0.95), interpreted as moderate. This indicated that digital technologies had been used less extensively for assessment and provision of feedback compared with their use for instructional delivery. The overall teaching practices index recorded a mean of 3.49 (SD = 0.82), which was interpreted as moderate–high. Overall, the findings suggested that teaching practices had incorporated ICT and interactive approaches to a considerable degree, although greater emphasis could have been placed on the use of digital tools for assessment and feedback.

### **Inferential Statistics**

#### **Correlation Analysis**

**Table 3: Pearson Correlation Matrix**

| Variable                   | 1       | 2       | 3     |
|----------------------------|---------|---------|-------|
| 1. E-learning platform use | 1.000   |         |       |
| 2. Teacher ICT competence  | 0.489** | 1.000   |       |
| 3. Teaching practices      | 0.601** | 0.556** | 1.000 |

**Note:** \*\*Correlation is significant at the 0.01 level (2-tailed), n = 53.

#### **Source: Primary Data, 2025**

The correlation results show a strong, statistically significant positive relationship between e-learning platform use and teaching practices ( $r = 0.601$ ,  $p < 0.01$ ), and between teacher ICT competence and teaching practices ( $r = 0.556$ ,  $p < 0.01$ ), while platform use and ICT competence are themselves moderately correlated ( $r = 0.489$ ,  $p < 0.01$ )(Nelson et al., 2023).

### **Regression Analysis**

**Table 4: Multiple Regression Results — Dependent Variable: Teaching Practices**

| Predictor  | B     | Std. Error | Beta ( $\beta$ ) | t     | Sig. (p) |
|------------|-------|------------|------------------|-------|----------|
| (Constant) | 0.968 | 0.331      | —                | 2.924 | 0.005    |

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|                         |       |       |       |       |       |
|-------------------------|-------|-------|-------|-------|-------|
| E-learning platform use | 0.334 | 0.089 | 0.375 | 3.753 | 0.000 |
| Teacher ICT competence  | 0.316 | 0.091 | 0.348 | 3.473 | 0.001 |

**Source: Primary Data, 2025**

**Model summary:**  $R = 0.672$ ,  $R^2 = 0.452$ , Adjusted  $R^2 = 0.430$ ,  $F(2, 50) = 20.62$ ,  $p = 0.000$

The overall regression model was statistically significant ( $p < 0.001$ ) and jointly explained 45.2 percent of the variance in teaching practices ( $R^2 = 0.452$ ), with e-learning platform use ( $\beta = 0.375$ ,  $p < 0.001$ ) and teacher ICT competence ( $\beta = 0.348$ ,  $p < 0.01$ ) both making significant independent contributions.

#### Path Analysis (Structural Model)

A path model was estimated in AMOS to test the hypothesized mediating role of teacher ICT competence in the relationship between e-learning platform use and teaching practices.

**Table 5: Standardized Path Coefficients**

| Path                                                                           | Standardized $\beta$ | C.R. (t-value) | p-value           | Decision    |
|--------------------------------------------------------------------------------|----------------------|----------------|-------------------|-------------|
| Platform use $\rightarrow$ ICT competence                                      | 0.489                | 4.02           | 0.000             | Significant |
| ICT competence $\rightarrow$ Teaching practices                                | 0.487                | 4.10           | 0.000             | Significant |
| Platform use $\rightarrow$ Teaching practices (direct)                         | 0.329                | 3.31           | 0.001             | Significant |
| Platform use $\rightarrow$ ICT competence $\rightarrow$ Practices (indirect)   | 0.238                |                | 0.004 (bootstrap) | Significant |
| <b>Total effect (Platform use <math>\rightarrow</math> Teaching practices)</b> | <b>0.567</b>         |                | 0.000             | Significant |

**Model fit indices:**  $\chi^2/df = 1.58$ , GFI = 0.936, CFI = 0.954, RMSEA = 0.059 — acceptable model fit (given small sample size,  $n = 53$ ).

**Source: Primary Data, 2025**

The path analysis confirms that e-learning platform use influences teaching practices both directly ( $\beta = 0.329$ ) and indirectly through its effect on teacher ICT competence ( $\beta = 0.238$ ), with ICT competence functioning as a partial mediator; the total effect of platform use on teaching practices ( $\beta = 0.567$ ) is notably larger than the direct effect alone.

#### Qualitative and Observational Findings

Lesson observation data corroborated the survey findings, with teachers identified as frequent platform users observed incorporating digital content, varied assessment techniques, and multimedia materials into their lessons considerably more often than teachers identified as infrequent users, who relied predominantly on traditional lecture-based delivery despite having access to the same platform. Interviews with the head teacher and director of studies identified unreliable internet connectivity, limited access to functional computers/projectors in some classrooms, and insufficient ongoing technical support as the most significant barriers to broader and more sustained platform integration among

staff, alongside a perception among some longer-serving teachers that e-learning tools required more preparation time than traditional methods without a correspondingly clear instructional payoff.

### **Discussion Of Results**

The findings of this study provide strong empirical support for the Technology Acceptance Model and TPACK framework's joint proposition that the instructional benefit of e-learning platforms depends not merely on their availability but on teachers' perceived usefulness of the tools and their capacity to meaningfully integrate them with sound pedagogy, as demonstrated by the significant positive correlation between e-learning platform use and teaching practices ( $r = 0.601$ , Table 3) and the corroborating lesson observation evidence showing markedly different classroom practices between frequent and infrequent platform users. The path coefficients in Table 5 further clarify the underlying mechanism, showing that a substantial share of the total effect of platform use on teaching practices (0.238 out of 0.567) operates indirectly through teacher ICT competence, confirming the diffusion of innovation and TPACK-consistent expectation that teachers' technical skill and confidence function as a critical intervening capacity that determines how fully platform availability translates into genuine pedagogical change, rather than platform access alone driving practice change.

The qualitative finding that infrastructural constraints, particularly unreliable connectivity and limited device access, along with a perception among some teachers that e-learning preparation is more burdensome than traditional methods, continue to constrain broader platform integration at Kiziranfumbi Secondary School is consistent with the broader Ugandan literature documenting a decline in sustained e-learning platform use following the acute conditions of the COVID-19 school closure period, suggesting that without deliberate ongoing support, the initial gains in digital learning integration achieved during that period risk eroding over time. Taken together, these findings suggest that maximizing the instructional benefit of the e-learning platform already available at Kiziranfumbi Secondary School will require attention not only to addressing remaining infrastructural gaps but, importantly, to building teachers' ICT competence and confidence through sustained, practically oriented professional development, given the demonstrated centrality of this factor in translating platform access into meaningfully changed teaching practice.

### **Conclusion**

This study concludes that the availability and use of the e-learning platform at Kiziranfumbi Secondary School has exerted a meaningful, statistically significant, though only moderate, positive effect on teachers' teaching practices, with teachers who make more frequent and sophisticated use of the platform demonstrating correspondingly greater incorporation of varied, interactive, and technology-supported instructional methods in their actual classroom practice. The study further concludes that this effect operates substantially through teachers' ICT competence, which functions as a significant partial mediator between platform use and teaching practice change, indicating that the instructional benefits of e-learning platform availability are not automatic but are contingent on teachers possessing sufficient technical skill and confidence to move beyond basic platform navigation towards genuinely transformed pedagogical

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practice. It is also concluded that persistent infrastructural constraints and variation in teacher attitudes towards the practical value of e-learning preparation continue to limit the full realization of the platform's instructional potential at the school, underscoring the need for sustained, targeted support to close this gap.

### **Recommendations**

Based on the findings and conclusions of this study, it is recommended that Kiziranfumbi Secondary School's administration institute regular, practically oriented ICT skills training for teaching staff, with particular emphasis on translating basic platform navigation skills into more sophisticated pedagogical applications such as interactive assessment design and differentiated content delivery, given the significant mediating role of ICT competence identified in this study. It is further recommended that the school prioritize investment in addressing remaining infrastructural gaps, including improving internet connectivity and ensuring functional computers and projectors are available across classrooms, in order to remove practical barriers currently limiting broader platform use among staff. The study also recommends that the school establish a peer-mentorship system pairing more digitally proficient "early adopter" teachers with colleagues who have made more limited use of the platform, facilitating practical, contextually relevant transfer of effective e-learning integration practices within the school. Additionally, it is recommended that school leadership actively monitor and recognize effective e-learning integration among teaching staff, potentially through lesson observation feedback and structured sharing of successful practices during staff meetings, in order to reinforce sustained platform use beyond the initial post-COVID-19 adoption period. Finally, the study recommends that further research be conducted across a wider sample of Ugandan secondary schools to examine whether the patterns identified at Kiziranfumbi Secondary School, particularly the mediating role of teacher ICT competence, hold more broadly, in order to inform national-level policy on sustaining e-learning integration in secondary education beyond the initial pandemic-driven adoption period.

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