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Assessing the effectiveness of the KEMI eLearning App in strengthening school leadership in Kenya

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Abstract

This paper assesses the effectiveness of the KEMI eLearning App in strengthening school leadership capacity in Kenya. While eLearning has emerged as a flexible approach to professional development, limited empirical evidence exists on its effectiveness in building leadership competencies among school leaders. Using a case study design, the study evaluated the impact of the Effective School Leadership (ESL) programme delivered through the KEMI eLearning App on leadership capability, workplace application of acquired competencies, and user experience. Data were collected through an online survey of school leaders from eight counties and analyzed using descriptive statistics, correlations, and qualitative responses. The findings revealed high perceived gains in instructional leadership, strategic thinking, curriculum implementation, stakeholder engagement, and ethical leadership, with mean scores ranging from 4.0 to 4.5 on a five-point scale. More than 78% of respondents reported applying the acquired competencies in their schools, while the App recorded a mean user satisfaction score of 4.52, with user experience showing the strongest correlation with satisfaction ($r = 0.78$). The study contributes empirical evidence that a mobile-based eLearning model can effectively strengthen school leadership capacity in low-resource contexts. It recommends improving digital infrastructure, expanding offline functionality, and enhancing interactive learning features to maximize programme effectiveness.

Key terms: eLearning App, eLearning program, leadership competencies

1.0 INTRODUCTION

1.1 Background of the Study

Effective school leadership is widely recognized as a key driver of improved teaching, learning, and institutional performance (Filipov, 2021). In Kenya, the implementation of the Competency-Based Education (CBE) curriculum has intensified the need for school leaders who possess strong instructional, strategic, and change management competencies. However, providing continuous professional development through conventional face-to-face training remains challenging due to geographical dispersion, high delivery costs, and school leaders' competing administrative responsibilities. Consequently, digital learning has emerged as a practical approach for expanding access to leadership development opportunities.

To respond to this need, the Kenya Education Management Institute (KEMI), in partnership with VVOB-Education for Development, developed the Effective School Leadership (ESL) programme and delivers it through the KEMI eLearning App. The mobile-first platform enables school leaders to access self-paced learning while complementing face-to-face sessions, thereby increasing flexibility, accessibility, and participation, particularly in remote and underserved areas (Mbogo & Gachanga, 2024).

Globally, eLearning has been shown to enhance learner engagement, flexibility, achievement, and satisfaction when supported by appropriate instructional design and technology (Al-Fraihat et al., 2020; Al-Momani & Pilli, 2021; Aryee et al., 2024). Studies have also demonstrated that digital professional development can strengthen leadership capacity and improve instructional practices (Abu Saa et al., 2024; Ismail et al., 2020). Nevertheless, evidence on the effectiveness of eLearning in strengthening school leadership competencies remains limited, particularly in low-resource contexts such as Kenya. Existing studies have focused primarily on technology adoption, user acceptance, and learner satisfaction (Al-Mamary et al., 2024; Nyimbili & Chalwe, 2023), with limited empirical evidence on whether competencies acquired through digital leadership programmes are transferred to workplace practice and sustained over time.

This study addresses this gap by evaluating the effectiveness of the KEMI eLearning App in strengthening school leadership through the Effective School Leadership programme. Specifically, it examines the programme's contribution to leadership capability development, the application of acquired competencies in schools, and users' experiences with the App in terms of accessibility, usability, engagement, and satisfaction. By providing empirical evidence from Kenya, the study contributes to the growing body of knowledge on digital professional development and offers practical insights for designing and scaling eLearning programmes for school leaders in resource-constrained settings.

In Kenya, the adoption of Competency-Based Education (CBE) has heightened the demand for school leaders equipped to drive effective instructional delivery. To address this need, the Kenya Education Management Institute (KEMI), in partnership with VVOB-Education for Development, introduced the Effective School Leadership (ESL) course through the KEMI eLearning App. This mobile-first platform is designed to strengthen leadership capabilities and support CBE implementation. As noted by Mbogo and Gachanga (2024), the app enables school leaders to access course materials anytime and anywhere, enhancing inclusivity, particularly in remote areas with limited connectivity. The program employs a blended learning model that integrates self-paced online modules with face-to-face sessions, ensuring both flexibility and interactive support. By leveraging the widespread use of smartphones, the app serves as the primary learning platform, making professional development accessible across diverse contexts.

1.2 Statement of the Problem

School leadership is central to improving teaching, learning, and institutional performance, particularly in the context of Kenya's Competency-Based Education (CBE) reforms (Filipov, 2021; Obiora & Uche, 2024). Although eLearning has expanded access to professional development by overcoming barriers related to distance, cost, and time (Ismail et al., 2020; Shanmugam et al., 2023), improved access does not necessarily translate into improved leadership practice. While digital platforms have made leadership training more accessible, there is limited empirical evidence on whether such programmes effectively strengthen school leaders' competencies and support the application of acquired skills in their schools.

Most existing studies have focused on technology adoption, user acceptance, and learner satisfaction (Al-Mamary et al., 2024; Nyimbili & Chalwe, 2023), with relatively little attention given to the effectiveness of eLearning in improving leadership capabilities, workplace practice, and user experience among school leaders, particularly in the Kenyan context. Consequently, despite the growing investment in digital professional development, it remains unclear whether eLearning programmes produce meaningful improvements in school leadership.

This study addresses this gap by evaluating the effectiveness of the KEMI eLearning App in strengthening school leadership through the Effective School Leadership (ESL) programme. Specifically, it examines the programme's influence on leadership capabilities, the application of acquired competencies in the workplace, and users' experiences with the platform to provide evidence for improving digital leadership development in Kenya.

1.3 Objectives of the Study

General Objectives

The primary objective of this research is to assess the efficacy of an eLearning App as a tool for the professional development of school leaders.

Specific Objectives

The study sought to;

i. determine effectiveness of eLearning program in enhancing the leadership capabilities of school leaders.

ii. evaluate the extent to which school leaders apply competencies derived from the eLearning program in their work environment.

iii. assess the user experience regarding the accessibility, usability, and engagement of the eLearning App and its impact on engagement and satisfaction.

1.4 Research questions

This study was guided by the following research questions:

i. How effective is the eLearning program in enhancing the leadership capabilities of school leaders?

ii. To what extent do school leaders apply competencies derived from the eLearning program in their work environment?

iii. What is the user experience regarding the accessibility, usability, and engagement of the eLearning App and how do these factors impact engagement and satisfaction?

2.0 LITERATURE REVIEW

2.1 Theoretical Framework

The Technology Acceptance Model (TAM) provides the theoretical foundation for this study by explaining how perceived usefulness and perceived ease of use influence users' acceptance and continued use of technology (Davis, 1989). In the context of this study, TAM is used to examine how school leaders' perceptions of the KEMI eLearning App's usability, accessibility, and usefulness affect their engagement, satisfaction, and application of leadership competencies acquired through the Effective School Leadership programme. Thus, the model offers an appropriate framework for assessing the effectiveness of the KEMI eLearning App in strengthening school leadership capacity in Kenya.

2.2 Empirical Studies

The literature on eLearning and leadership development is organized around three variables guiding this study: effectiveness, application of acquired competencies, and user experience.

Studies generally agree that eLearning can strengthen professional capacity when content is relevant, interactive, and well supported. Al-Momani and Pilli (2021) found that mobile-supported eLearning improved learner interaction and achievement, while Abu Saa et al. (2024) reported that digital empowerment enhanced principals' strategic and instructional leadership. Similarly, Ismail et al. (2020) showed that e-training supported continued professional learning among aspiring school leaders. However, these studies differ in emphasis: some focus on learner achievement, others on technology acceptance or digital empowerment. Few directly assess whether eLearning improves specific school leadership competencies such as instructional leadership, curriculum implementation, strategic thinking, and ethical leadership.

Literature suggests that eLearning is most valuable when acquired knowledge is transferred into workplace practice. Mwangi and Chebet (2022) found that school leaders trained through digital platforms improved strategic planning practices, while Otieno and Wanjala (2023) reported enhanced instructional supervision and teacher feedback. Kimani and Oduor (2024) further linked digital leadership training to improved financial accountability, and Njeri and Mutua (2023) associated digital training with stronger stakeholder engagement. Nevertheless, a key contradiction emerges: while these studies report positive application of digital learning, Bartek et al. (2022) caution that online learning does not always result in sustained institutional change or practice transfer. This inconsistency highlights the need to examine whether competencies acquired through the ESL programme are actually applied in school settings.

User experience remains a critical determinant of eLearning success. Al-Fraihat et al. (2020) found that accessibility and system quality influence satisfaction, while Stern (2020) emphasized intuitive interface design as essential for reducing learner frustration. Martin et al. (2021) added that cognitive accessibility, including clear visuals and chunked content, supports participation. In contrast, Fattah et al. (2022) and Anasel and Swai (2023) identified weak infrastructure, connectivity challenges, and uneven digital readiness as barriers to effective eLearning use. These findings show that positive user experience depends not only on platform design but also on reliable access, technical support, and contextual readiness.

3.0 METHODOLOGY

The study adopted a case study design to evaluate the effectiveness of the KEMI eLearning App within the context of the Effective School Leadership (ESL4JS) programme. Although quantitative methods were employed, the case study design was appropriate because it enabled an in-depth assessment of a specific eLearning intervention.

The study targeted 264 school leaders who completed the programme across eight counties. Using simple random sampling, 157 participants were selected, of whom 134 completed an online questionnaire (89.3% response rate). The questionnaire measured three study variables: programme effectiveness, application of acquired competencies, and user experience.

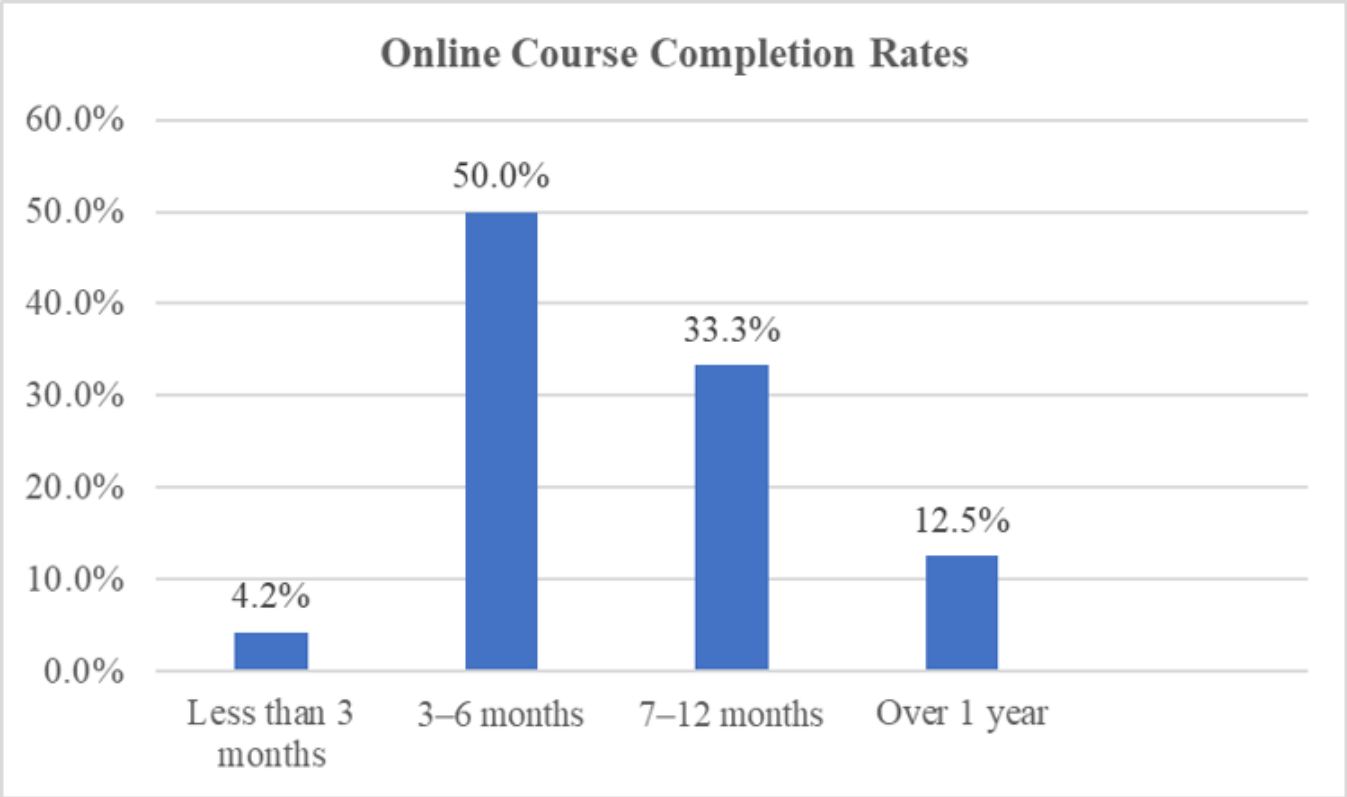
Quantitative data were analysed using SPSS Version 26.0. Descriptive statistics summarized the data, t-tests compared group means, Pearson's correlation examined relationships among study variables, and multiple regression assessed the influence of accessibility, user experience, and engagement on user satisfaction. Regression assumptions, including normality, linearity, homoscedasticity, independence of errors, and multicollinearity, were tested before analysis. Ethical principles of informed consent, confidentiality, and voluntary participation were observed throughout the study.

4.0 RESULTS/FINDINGS OF THE STUDY

An online questionnaire was administered to evaluate the effectiveness of the eLearning programme in strengthening school leaders' competencies. Of the 157 school leaders sampled, 134 completed the survey, yielding a response rate of 89.3%. The respondents comprised 89 males (66.7%) and 45 females (33.3%), indicating a strong participation rate and providing a robust basis for the analysis.

Length of usage distribution

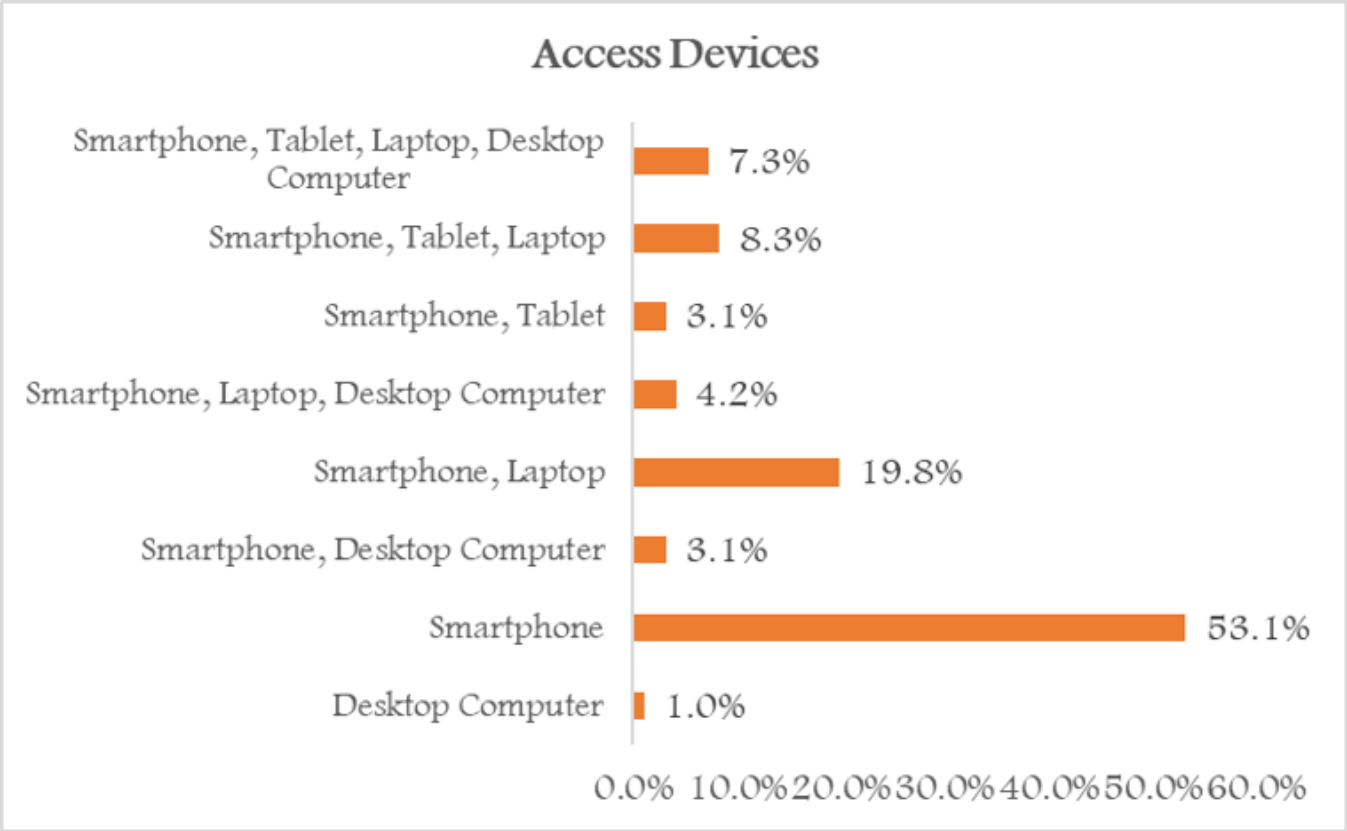
School leaders were surveyed on their prior completion of KEMI eLearning courses and the duration of those courses. The findings reveal that a majority have engaged in online learning, reflecting a growing acceptance and integration of digital platforms in professional development.



Compared with other courses offered by KEMI through its online learning platform, the Effective School Leadership (ESL) programme achieved the highest completion rate (90.4%), demonstrating exceptional learner retention and engagement. In contrast, the Diploma in Education Leadership and Management (DELM) and Teacher Professional Development (TPD) programmes recorded substantially lower completion rates of 6.8% and 1.4%, respectively. These findings suggest that the ESL programme was considerably more successful in supporting learner completion than other online programmes offered during the same period.

Access Devices

Survey findings on the devices used by school leaders to access online programs indicate that the KEMI eLearning App is primarily accessed through smartphones as indicated by 53.1%. but the results also indicated that the leader access the online courses through other devices as shown in the figure below.



The strong reliance on mobile devices underscores the need for a mobile-first design strategy, incorporating touch-friendly navigation and offline functionality. At the same time, the notable supplementary use of laptops highlights the importance of ensuring seamless cross-device compatibility to enable flexible and continuous learning experiences.

Objective 1: Effectiveness of eLearning program in Enhancing school Leadership Capabilities

The analysis examined whether participation in KEMI's eLearning programme enhanced school leaders' professional practice across nine leadership competencies. Overall, the high mean scores (M = 4.32–4.52 on a five-point scale) indicate that participants perceived the programme as highly effective in strengthening their leadership capabilities. The highest-rated areas were relevance of leadership content (M = 4.52) and curriculum implementation (M = 4.50), while all other competencies—including instructional leadership, strategic thinking, communication, professional growth, feedback, innovation, and ethical leadership—recorded mean scores above 4.30, reflecting consistently strong positive perceptions of the programme's impact.

	Feature	High Performance Mean	Low Performance Mean	Mean Difference	T Statistic	P Value
1.	Instructional leadership principles	4.372	4.5	-0.127	-0.234	0.814
2.	Strategic & analytical thinking	4.319	4	0.319	0.609	0.543

3.	Communication & interpersonal skills	4.425	4	0.4255	0.793	0.429
4.	Reflection & professional growth	4.393	4.5	-0.1063	-0.191	0.848
5.	Feedback improves performance	4.393	3.5	0.893	1.733	0.086
6.	Relevant leadership content	4.521	4	0.521	0.933	0.353
7.	Curriculum implementation	4.5	4	0.5	0.964	0.337
8.	Confidence in change & innovation	4.446	4.5	-0.0531	-0.096	0.923
9.	Ethical/value-based leadership	4.446	4	0.446	0.774	0.440

Analysis of nine key leadership-related statements revealed that both high- and low-performing participants reported consistently positive perceptions of the programme, with mean scores ranging from 4.0 to 4.5 on a five-point scale. No statistically significant differences were observed between the two groups, suggesting that the programme supported leadership development equitably regardless of participants' performance levels. To further evaluate the programme's effectiveness, a comparative analysis was conducted to examine participants' perceptions of eLearning versus face-to-face training in enhancing school leadership development. Specifically, respondents were asked whether eLearning provided equal or better professional development than traditional face-to-face training across the same nine leadership-related competencies.

When the nine leadership items were correlated with responses to the question on whether eLearning provides equal or better professional development compared to face-to-face training, the survey yielded the following results.

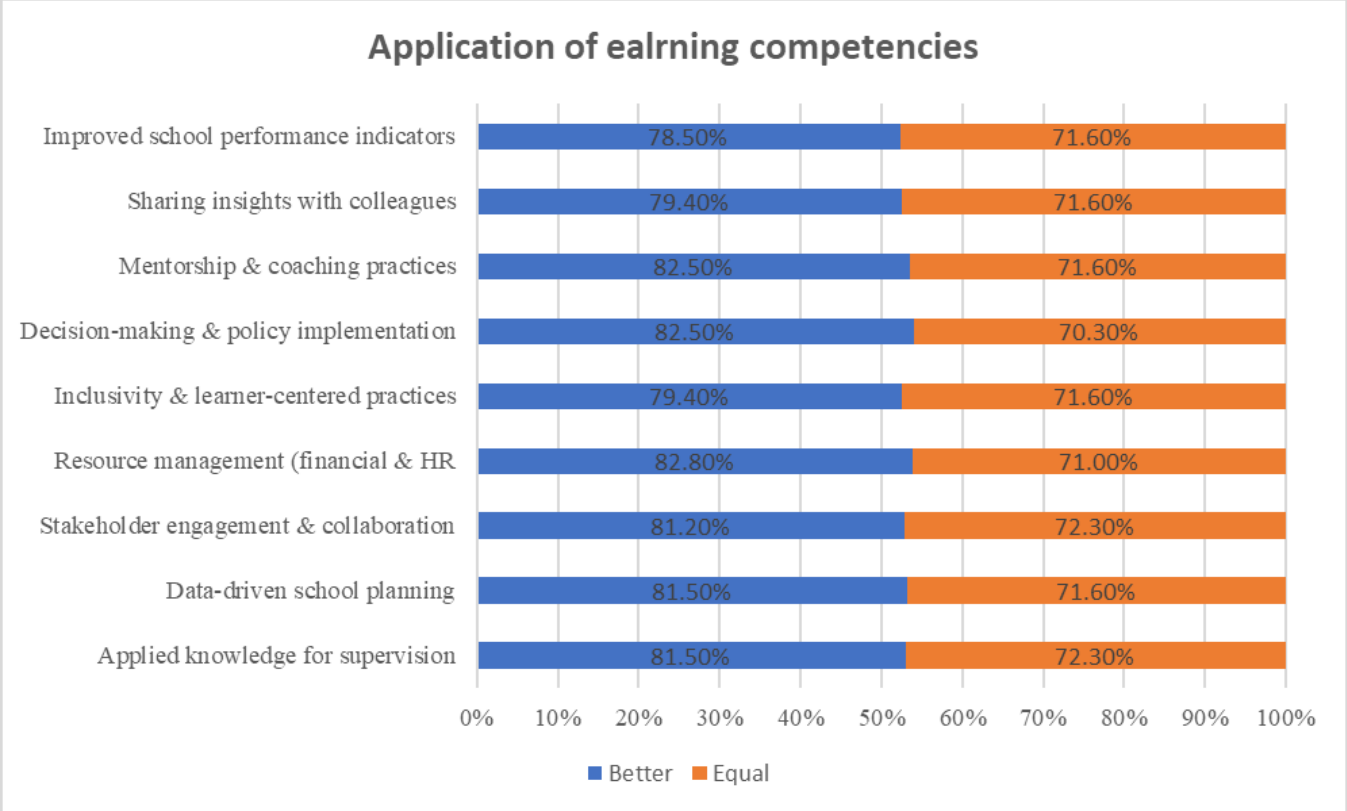
Feature	**eLearning Preferred Mean**	**Face to Face Preferred Mean**	**Mean Difference**	**T Statistic**	**P Value**
Instructional leadership principles	4.406	4.324	0.082	0.517	0.606
Strategic & analytical thinking	4.389	4.189	0.200	1.315	0.191
Communication & interpersonal skills	4.457	4.351	0.106	0.674	0.501
Reflection & professional growth	4.406	4.378	0.028	0.174	0.862

Feedback improves performance	4.423	4.297	0.126	0.825	0.411
Relevant leadership content	4.508	4.513	-0.005	-0.030	0.975
Curriculum implementation	4.474	4.513	-0.038	-0.254	0.799
Confidence in change & innovation	4.457	4.432	0.025	0.156	0.876
Ethical/value-based leadership	4.457	4.405	0.052	0.307	0.758

Overall, both groups rated their experiences highly, with mean scores ranging from 4.19 to 4.51 on a five-point scale, indicating strong satisfaction with both learning modes. Although all mean differences were small and statistically insignificant ($p > 0.05$). Therefore, the study does not provide sufficient evidence to conclude that one group rated the learning experience significantly better than the other.

Objective 2: Application of competencies derived from the eLearning program in their work environment

The survey examined the areas in which school leaders apply the leadership competencies acquired through the Effective School Leadership (ESL) online course. These findings were then correlated with responses to the question on whether participants had observed measurable improvements in their leadership practice since completing the course.

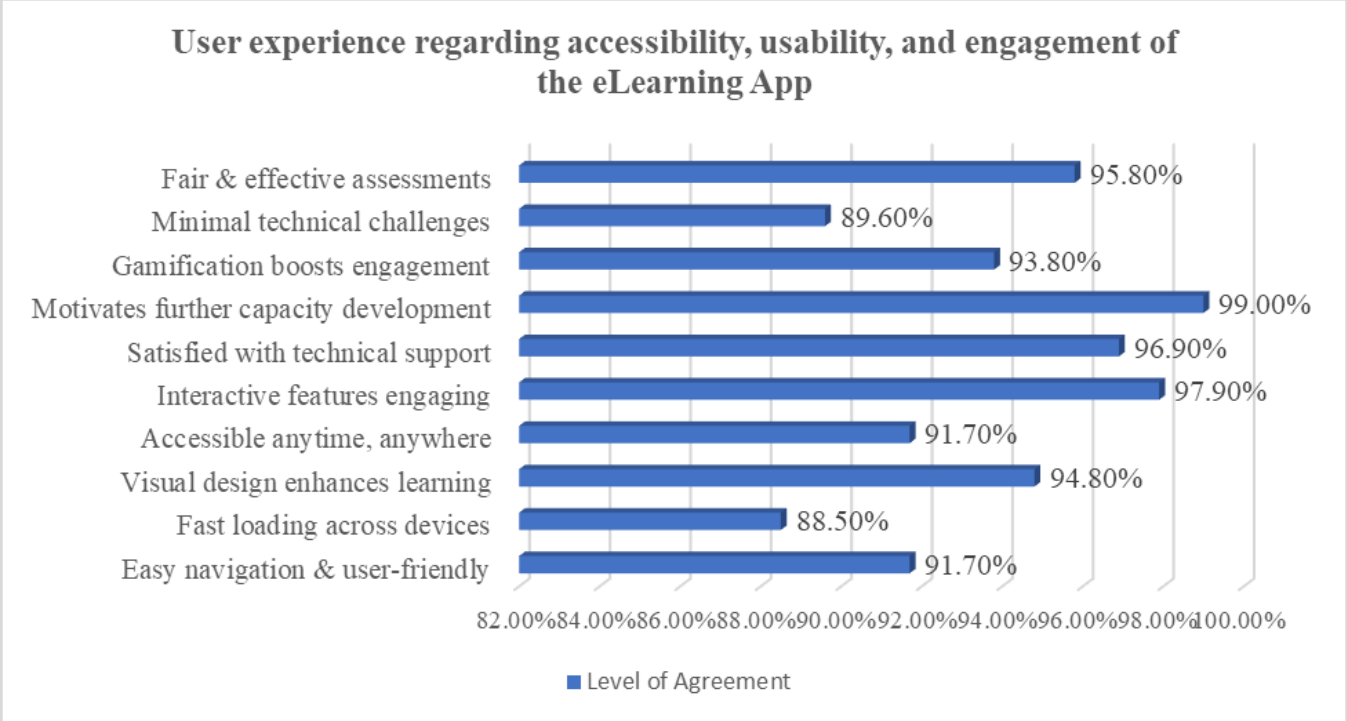


The data demonstrates that eLearning has been highly effective in developing and transferring professional competencies to school leaders' work environments. Across all nine areas a strong majority (ranging from 78.5% to 82.8%) report applying eLearning-acquired knowledge to improve their practice.

This indicates that digital training is not only relevant but is being actively utilized to enhance key leadership functions. Notably, when compared to face-to-face training, eLearning is perceived as equal or better by a significant majority (70.3% to 72.3%), suggesting that the digital format holds its own against traditional methods in terms of practical application. This strong performance across diverse competency areas from strategic tasks like policy implementation to relational tasks like stakeholder collaboration confirms that eLearning is a viable and impactful mode for professional development in the education sector.

Objective 3: User experience regarding the accessibility, usability, and engagement of the eLearning App and its impact on engagement and satisfaction.

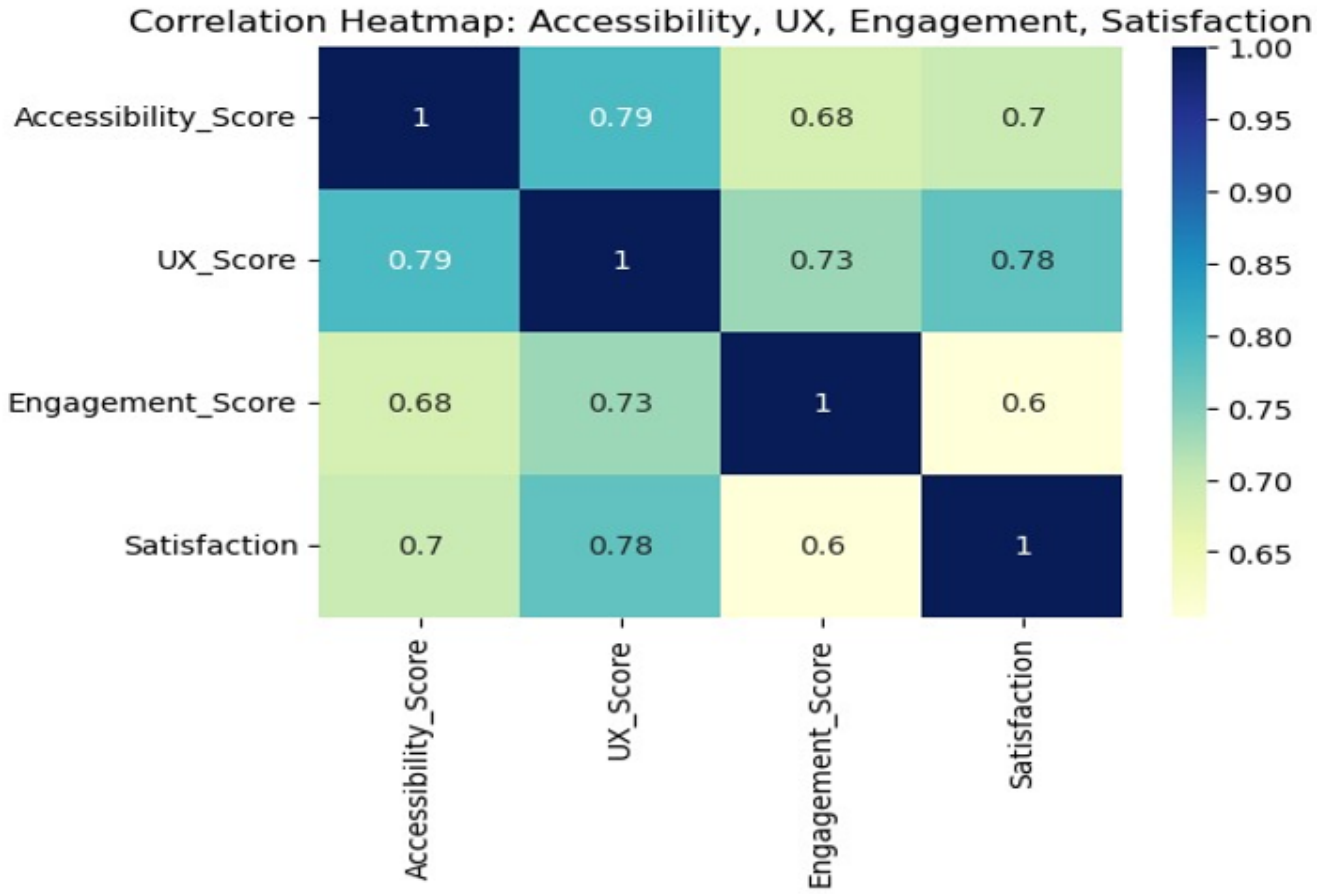
Accessibility and user experience were analyzed to determine ease of use, interactivity, and satisfaction. The analysis sought to assess the level of agreement on various items regarding user experience of eLearning KEMI App.



According to the statistical data, the eLearning app was well-accepted and received particularly high grades for user involvement, motivation, and support. Even though there is a minor decline in technical dependability and device performance, overall, the experience is great. Further analysis revealed that the mean composite score was 4.52 indicates that the app was perceived as highly effective by the majority of users. Respondents particularly valued the App's motivation in pursuing further online professional development (99.0%).

A Correlation Analysis of Accessibility, User Experience (UX), and Engagement"

A correlation matrix, presented as a heat map, was developed to illustrate the strength and direction of relationships among platform attributes. This visualization provides a nuanced understanding of how accessibility, user experience, and engagement interact to influence the overall learning experience.



User experience emerged as the most influential predictor of satisfaction, with a correlation coefficient of r = 0.78. Although the relationship is strong, it does not imply that improvements in user experience necessarily cause higher satisfaction.

Accessibility also demonstrated a substantial correlation with satisfaction r = 0.70, highlighting its foundational role in enabling equitable participation. Reliable access across devices, stable connectivity, and ease of accessing learning resources are strongly associated with positive learner experiences. When learners can reliably access content across devices and contexts, their engagement and perceived value of the platform increase.

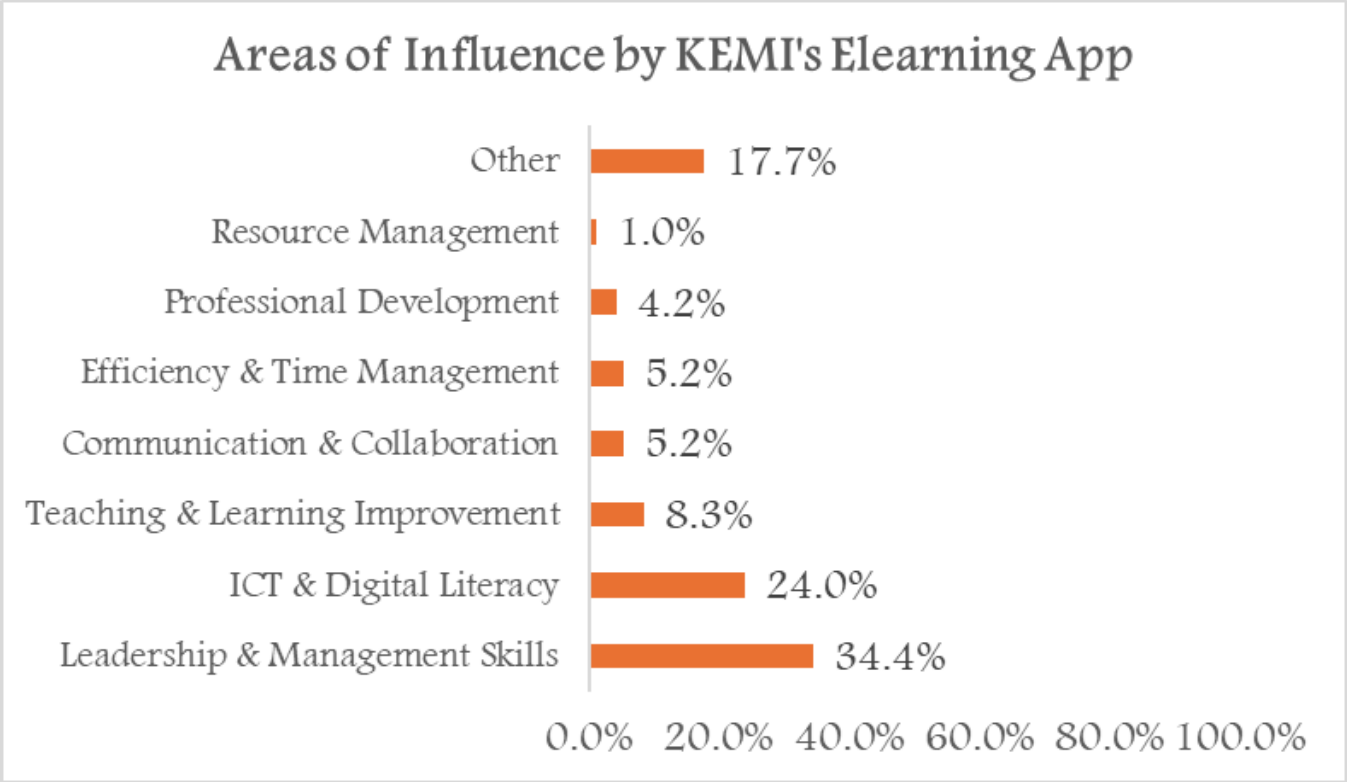
Engagement, while moderately correlated with satisfaction r = 0.60, remains a meaningful contributor. Interactive elements such as quizzes, discussion forums, and progress tracking contribute positively to learner satisfaction, although the relationship is weaker than those observed for user experience and accessibility.

Notably, the inter-variable correlations further illuminate systemic dependencies. UX and accessibility are strongly correlated r = 0.79. This implies that improvements in interface design, navigation, and responsiveness often coincide with improved accessibility, suggesting these dimensions reinforce one another. UX and engagement r = 0.73 suggests that an intuitive interface encourages learners to participate more actively in learning activities, discussions, and assessments.

Qualitative Analysis

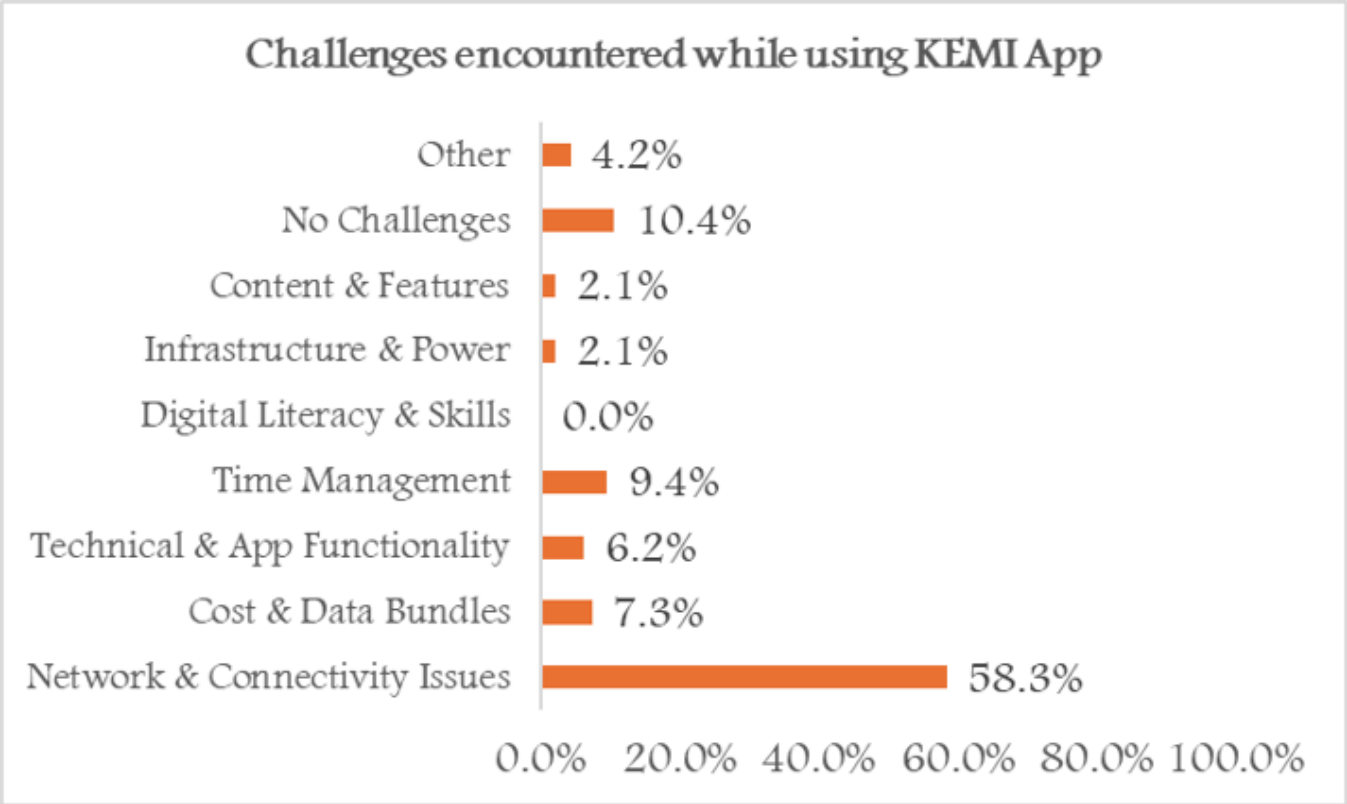
a) KEMI eLearning App's Impact on School Leadership Efficacy

School leaders were asked to indicate ways in which the KEMI eLearning App influenced their professional practice. The most prominent impact was observed in leadership and management skills (34.4%), followed by ict and digital literacy (24.0%). other areas included teaching and learning improvement (8.3%), communication and collaboration (5.2%), efficiency and time management (5.2%), and professional development (4.2%). resource management registered a modest influence (1.0%), while other areas collectively accounted for (17.7%).



b) User Experience Challenges

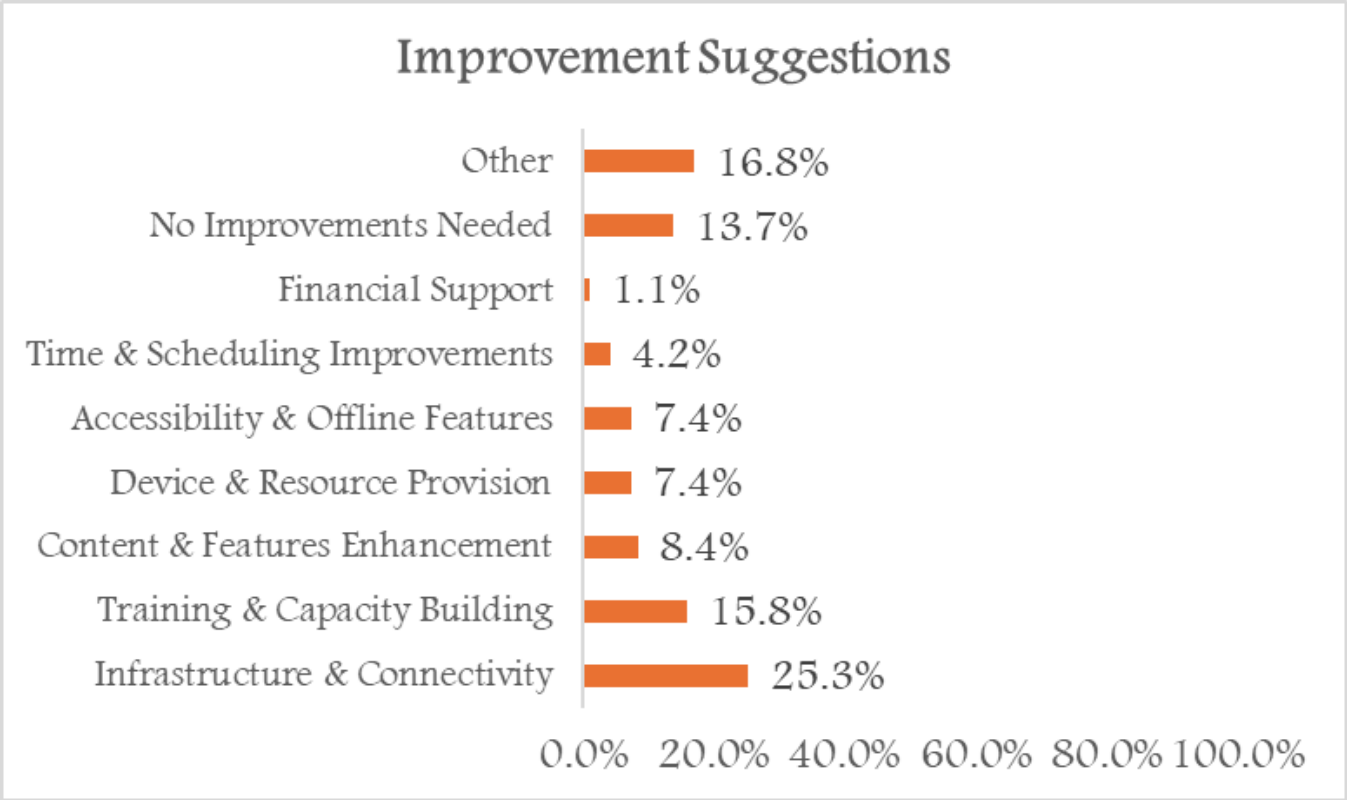
Regarding the challenges they had encountered while using the KEMI eLearning App, the most frequently reported challenge was Network and Connectivity Issues (58.3%). Other notable barriers included cost and data bundles (7.3%), time management (9.4%), and technical and app functionality (6.2%). a smaller proportion cited infrastructure and power (2.1%), content and features (2.1%), and digital literacy and skills (0.0%). interestingly, no challenges were reported by some respondents (10.4%), while other challenges accounted for (4.2%).



The KEMI eLearning App is confronted by a critical infrastructure challenge, with 58.3% of users identifying network and connectivity issues as the primary barrier to effective use. This difficulty is further compounded by concerns over the cost of data bundles (7.3%) and time management constraints (9.4%), underscoring both accessibility and engagement limitations. Despite these obstacles, the app demonstrates strong usability fundamentals: no users reported digital literacy barriers, and 10.4% experienced no issues at all, affirming the soundness of its core technology. While a smaller proportion of users (6.2%) noted technical stability concerns, the evidence suggests that the app's design is not the central problem.

c) Improvements that could enhance the effectiveness and accessibility of the eLearning App.

Based on feedback from school leaders, leading in areas that require improvement is infrastructure & connectivity (25.3%), training & capacity building (15.8%), other (16.8%), no improvements needed (13.7%), content & features enhancement (8.4%), accessibility & offline features (7.4%), device & resource provision (7.4%), time & scheduling improvements (4.2%), financial support (1.1%).



Based on feedback from school leaders, the KEMI eLearning App shows promise but requires strategic improvements to reach its full potential. The most urgent issue is infrastructure, with 25.3% citing connectivity and power challenges. Many also call for more frequent, practical training to strengthen digital skills. While 14% are satisfied with the app, others highlight the need for offline features and better content accessibility, alongside hardware limitations for some users. Recommended priorities include expanding training and content in the short term, developing offline capabilities in the medium term, and advocating for improved infrastructure and device access in the long term.

DISCUSSION

The chapter presents an analysis of the data collected to assess the effectiveness of the KEMI eLearning App in developing the capacity of school leaders in Kenya. The findings are presented against the study's three core objectives, providing a empirical basis for evaluating the digital professional development program.

Demographic and Usage Patterns

The study begins by establishing the context of eLearning adoption among the sampled school leaders. The high response rate (89.3%) and finding that a majority had engaged with KEMI's online courses indicate a growing adoption of digital platforms for professional development in Kenya. This aligns with global trends noted by Ismail et al. (2020), who highlighted the exponential growth of e-learning as a driver of organizational transformation. The finding that the Effective School Leadership (ESL) course had a significantly higher completion rate (90.4%) compared to other KEMI courses suggests that the course's design, relevance, or delivery model potentially its blended nature as described by Al-Momani and Pilli (2021) was particularly effective in sustaining engagement.

Furthermore, the data on access devices is critical. The predominant use of smartphones (53.1%) validates the "mobile-first" design strategy of the KEMI app, a approach earlier justified by Mbogo and Gachanga (2024), who noted its importance for accessibility in remote areas. This finding directly

addresses concerns raised by Fattah et al. (2022) and Mugambi et al. (2025) regarding infrastructural barriers, demonstrating that a mobile-centric approach can bridge some accessibility gaps, even as the supplementary use of laptops underscores the need for cross-device compatibility.

Objective 1: Effectiveness in Enhancing Leadership Capabilities

The survey results revealed a strongly positive perception of the eLearning program's effectiveness. The consistently high mean scores (ranging from 4.0 to 4.5 out of 5) across nine leadership competencies surveyed such as instructional leadership, strategic thinking, and ethical leadership indicate strong believe in the program enhancing school leaders' capabilities. The minimal statistically significant differences between high and low performers suggests the program's benefits are equitably distributed, a strength of well-designed digital learning environments.

The comparative analysis with face-to-face training reveals that both modalities were rated highly, but there is significant preference for eLearning in areas like strategic thinking and communication challenges that used to dominate in-person training. The finding reverberates with the work of Al-Momani and Pilli (2021), who argued that blended and mobile learning environments can significantly enhance learner engagement and achievement. It suggests that for school leaders, the flexibility and self-paced nature of eLearning, as highlighted by Kiprotich et al. (2021), may offer unique advantages in developing certain analytical and self-reflective competencies.

Objective 2: Application of Competencies in the Work Environment

The survey results show compelling evidence for the transfer of learning from the digital platform to real-world practice. The high application rates (78.5% to 82.8%) across diverse domains like policy implementation, instructional supervision, and stakeholder collaboration demonstrate that the acquired competencies are not merely theoretical but are being actively utilized. This addresses the concern raised by Bartek et al. (2022) regarding the frequent failure of online learning to translate into applied practice.

Analysis of literature review reveals a strong support the survey findings. For example, the application in strategic planning aligns with Mwangi and Chebet's (2022) observation that eLearning-trained principals were more adept at aligning school plans with national priorities. Similarly, improvements in instructional supervision and financial management corroborate the findings of Otieno and Wanjala (2023) and Kimani and Oduor (2024), respectively. The application in stakeholder engagement further validates Njeri and Mutua's (2023) emphasis on digital training fostering more inclusive communication strategies. The fact that eLearning was perceived as equal or better than face-to-face training by a significant majority (70.3% to 72.3%) for practical application is a powerful endorsement of its viability, echoing Mtebe and Raphael's (2021) assertion that when conditions of relevance and support are met, eLearning can effectively enhance professional practice.

Objective 3: User Experience, Accessibility, and Engagement

The analysis of user experience reveals that the KEMI eLearning App was generally well-received, with high scores for motivation, engagement, and support. The high composite score (4.52) and the overwhelming motivation for further online professional development (99.0%) indicate strong satisfaction. This positive user experience can be attributed to principles of good design highlighted in the literature, such as the intuitive UX design emphasized by Stern (2020) and the cognitive accessibility achieved through chunked content (Martin et al., 2021). The motivational elements may also be linked to the gamification and feedback mechanisms discussed by Zhao (2021).

The correlation analysis provides a sophisticated understanding of the factors driving satisfaction. The

strong correlation between User Experience (UX) and satisfaction (r = 0.78) underscores the foundational importance of design, as argued by Stern (2020). The significant correlation between accessibility and satisfaction (r = 0.70) empirically validates the claims of Al-Fraihat et al. (2020), who identified accessibility as key to user satisfaction. The interconnectedness of UX and accessibility (r = 0.79) demonstrates that these are not isolated concerns but are synergistic, a crucial consideration for future development.

Qualitative Analysis: Impacts and Challenges

The qualitative findings enrich the quantitative data by detailing the specific areas of impact and the nature of the challenges. Qualitative data unveils the primary challenge as infrastructure. Network and connectivity issues (58.3%) were the most frequently reported barrier, a problem extensively documented in the Kenyan context by Mugambi et al. (2025). This challenge is compounded by the cost of data and time constraints, creating a significant hurdle to equitable access. The call for improvements in infrastructure and offline features (25.3%) directly addresses this limitation and aligns with recommendations from Wanjiru (2025) and Nyambura (2023) for ongoing support and adaptable design to ensure sustained engagement.

The dominant impact on leadership and management skills (34.4%) confirms the program's core objective, while the significant improvement in "ICT and digital literacy" (24.0%) represents a valuable secondary outcome, equipping leaders for broader digital transformation in their schools, as discussed by Abu Saa et al. (2024).

The detailed breakdown of challenges provides a clear agenda for intervention. The predominance of connectivity issues, alongside calls for more training and offline features, suggests a multi-faceted approach is needed. This echoes the comprehensive view of Nyambura (2023), who argued that sustained positive user experience requires not just a good platform, but also ongoing mentorship, responsive technical support, and integration into institutional routines.

5.0 CONCLUSION AND RECOMMENDATIONS

Conclusion

This study provides empirical evidence that the KEMI eLearning App is an effective platform for strengthening school leadership capacity in Kenya. Beyond demonstrating high levels of user satisfaction, it shows that eLearning enhances leadership competencies, supports the application of acquired skills in school practice, and offers a user experience that promotes sustained engagement. These findings extend existing literature by providing evidence from a Kenyan, low-resource context where research on the effectiveness of digital leadership development remains limited.

The findings also reinforce the Technology Acceptance Model (TAM) by demonstrating that perceived usefulness, accessibility, and ease of use are strongly associated with user satisfaction and continued engagement. Practically, the study supports the integration of mobile-based eLearning into school leadership professional development as a scalable and cost-effective complement to conventional face-to-face training.

Recommendations

The study recommends strengthening digital infrastructure, expanding offline functionality, and enhancing interactive learning features to improve accessibility and learner engagement. It also

recommends institutionalizing the KEMI eLearning App as a sustainable model for continuous professional development and conducting longitudinal studies to examine the long-term impact of eLearning on school leadership effectiveness and learner outcomes.

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