

INTEGRATION OF DIGITAL TUTORSHIP FOR ACADEMIC SUPPORT: LESSONS FROM A UNIVERSITY IN THE EASTERN CAPE

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Abstract

The growing demand for equitable and quality education has intensified the adoption of innovative academic support strategies in higher education, with digital tutorship emerging as a transformative approach. As universities in South Africa seek solutions to address under-preparedness, high dropout rates, and resource constraints, digital tutoring offers flexible and accessible support for diverse student populations. The aim of the study was to understand how digital tutorship could be integrated as a form of academic support in a university in the Eastern Cape and to examine its perceived benefits and challenges in enhancing student learning outcomes. The study was guided by Digital Equity Theory. The study utilised a qualitative research approach. Data were collected through semi-structured interviews and focus group discussions with 20 students and 3 tutors purposively sampled from the Faculty of Education. Data were analysed thematically. The study found that both students and tutors noted that digital tutorship enhanced access, flexibility, and engagement, with students able to revisit recorded lessons, collaborate with peers, and receive personalised support through digital platforms. Second, persistent challenges such as faculty preparedness, uneven connectivity, limited resource availability, and lack of tutor training were found to undermine effectiveness. In conclusion, the study revealed that digital tutoring significantly enhances student engagement, access, and equity, with high levels of student motivation and participation attributed to hybrid, technology-supported tutorials. The study recommended that universities may implement mandatory digital pedagogy training and professional development for tutors to enhance digital literacy, technical skills, and pedagogical readiness for effective digital tutorship integration.

Keywords: *Academic support, digital equity, digital tutorship, higher education, student learning outcomes.*

1. Introduction

The growing demand for quality education and academic support in higher education institutions has imposed the adoption of innovative teaching and learning strategies (Mohamed Hashim, Tlemsani & Matthews, 2022). Menshikova, Bonacci and Scarozza (2025) highlighted that Digital Tutorship programmes have emerged as a transformative approach to enhancing traditional classroom instruction and fostering independent learning. As universities globally respond to issues such as increased student enrolments, diverse student needs, and the effects of the COVID-19 pandemic, digital tutoring has gained prominence as a tool for bridging gaps in academic support. Tutorship plays a vital role in improving student learning outcomes by offering guided mentorship, reinforcing complex concepts, and creating platforms for academic collaboration. In the South African context, particularly in provinces such as the Eastern Cape, challenges, including under-prepared students from disadvantaged schooling backgrounds, resource constraints, and high dropout rates, have heightened the need for effective academic support mechanisms. Digital tutorship programmes offer potential solutions by providing flexible, accessible, and student-centred modes of support that extend beyond the confines of lecture halls (Miles, 2021). However, the successful integration of digital tutorship into higher education is influenced by factors such as technological infrastructure, pedagogical approaches, student engagement, and institutional readiness (Alenezi, 2023). While international studies have highlighted the benefits of such programmes in enhancing motivation, retention, and performance, limited empirical research has focused on their integration and effectiveness within South African universities, particularly in rural and under-resourced contexts such as the Eastern Cape. The study seeks to understand how digital tutoring initiatives could be implemented, how they contribute to student learning, and what lessons may be drawn to strengthen academic support systems in higher education. By examining the experiences of both students and tutors, the study aims to contribute to policy and practice by identifying challenges, successes, and innovative pathways for the sustainability of digital tutorship programmes in South African universities. The study was underpinned by the following research questions:

1. How could digital tutorship be integrated as a form of academic support at a university in the Eastern Cape?
2. What could be the perceived benefits and challenges of digital tutorship programmes in enhancing student learning outcomes?

2. Literature review

The integration of digital tutorship for academic support is a global trend, with universities across Europe, Asia, Africa, and South Africa adapting innovative models to enhance student success and equity in higher education. Nyongesa & Van Der Westhuizen (2025) highlighted the core practices, digital platforms, lessons, and challenges relevant to a university in the Eastern Cape. Universities in Europe employ a mix of institutionalised tutoring frameworks and digital platforms (Chugh et al., 2023). Tutorial Action Plans (TAP), as used in Spain and the UK, combine face-to-face and digital tutoring, aimed at academic integration and student engagement. The increased virtualisation of teaching has led to a shift toward platforms such as Google Meet, university-managed e-learning portals, and teacher websites, which provide up-to-date information and facilitate direct communication (Antoniadis et al., 2022). Challenges noted include limited faculty preparedness and gaps in digital literacy, making ongoing professional development essential for successful integration of digital tutorship (Kerkhoff & Makubuya, 2022). Asian universities, such as those in Taiwan and East Asia, have implemented online tutoring projects to bridge digital divides and support remote and marginalised students (Deol & Kaur, 2024). Projects such as the Digital Learning Companion leverage international student tutors, using video-conferencing platforms for online sessions to promote cultural exchange and technical and motivational growth among both tutors and tutees (Tran et al., 2024). Effectiveness depends on infrastructure, platform usability, and tailored organisational support, with ongoing research focusing on tutor perceptions and technical solutions to improve tuition quality in digital environments (Chugh et al., 2023).

African higher education institutions, especially in open and distance settings, have adopted e-tutor models to reach widely distributed, diverse student populations (Miles, 2021). E-tutoring enhances access by enabling students to interact regularly with tutors for both academic and psychosocial support (Nyongesa & Van Der Westhuizen, 2025). Integration of digital tools such as learning management systems, discussion forums, and online messaging fosters independent learning, improves success rates, and personalises feedback and guidance (Munna et al., 2024). Challenges include digital literacy, connectivity, and the need for institutional support systems to effectively prepare tutors for hybrid roles. South African universities, including those in the Eastern Cape, have prepared blended tutoring programmes that integrate digital solutions for academic support (Miles, 2021). The Incubator School Programme is a very significant programme that involves student tutors from Walter Sisulu and Nelson Mandela Universities working with secondary students using curriculum-aligned digital resources on tablets with multi-language support and interactive features. The integrated tutor model (ITM) at UNISA combines e-tutoring delivered nationally via platforms such as myUnisa with face-to-face support at regional centres, allowing flexible learning, rapid feedback, and widespread access (Ntuli, 2020). These models highlight South Africa's emphasis on equity, multilingualism, and the professional development of tutors, which may be vital for success in digital academic support, especially in rural and resource-constrained environments (Rwodzi & De Jager, 2021).

3. Theoretical framework

The study employed a Digital Equity Theory that addresses access to digital resources and skills as a fundamental factor influencing learning outcomes (Selwyn, 2004). The theory understands the importance of equitable access to connectivity, devices, and digital literacy training in enabling meaningful participation in digital tutorship. The framing is relevant in the Eastern Cape context, where socio-economic disparities and infrastructural challenges could impede the full benefits of digital academic support.

4. Methods

4.1. Research approach

The study adopted a qualitative research design to understand in depth the experiences, perceptions, and challenges related to the integration of digital tutorship for academic support (Tran et al., 2024). A qualitative approach was suitable as it enabled rich, contextualised understanding of both tutors' and students' perspectives and how digital tools were used within academic support systems. A case study design was employed, focusing on a selected university in the Eastern Cape to provide detailed insights within its unique socio-educational context (Miles, 2021).

4.2. Population and sampling

The population comprised the academic tutors involved in providing digital tutoring services and undergraduate students who are currently utilising these digital tutoring services. A purposive sampling strategy was used to select participants who have direct experience with the digital tutorship programme (Tran et al., 2024). 3 tutors from the Business Management Education Department and 20 students from the same Department were recruited to ensure a variety of perspectives while allowing for manageable, in-depth data collection.

4.3. Data collection methods

Data were collected through semi-structured interviews with tutors and students to understand their experiences, perceptions, challenges, and suggestions regarding digital tutorship (Tran et al., 2024). The study further used group discussions with groups of students to elicit interactive discussions on the benefits, barriers, and impact of digital academic support (Mansour, 2024). All interviews and focus groups were conducted through a digital application.

4.4. Data analysis

Data were analysed using thematic analysis following Braun and Clarke's (2006) framework. This involves familiarisation with the data, generating initial codes, searching for themes, reviewing and defining themes, and producing the final report. NVivo, a qualitative data analysis software, was used to organise and assist in systematically coding data.

5. Findings

5.1. Biographic profile of participants

Table 1. Demographic Profile of Participants.

<i>Criteria</i>	<i>Tutors & Students</i>	<i>Frequency</i>
<i>Student Gender</i>	<i>Males</i>	<i>6</i>
	<i>Females</i>	<i>14</i>
<i>Tutor Gender</i>	<i>Both Males</i>	<i>2</i>
<i>Average Age of Students</i>	<i>19-23 Years</i>	<i>18</i>
	<i>24 Years</i>	<i>2</i>
<i>Average Age of Tutors</i>	<i>25-27</i>	<i>3</i>
<i>Grade 10</i>	<i>Students</i>	<i>20</i>
	<i>Tutors</i>	<i>3</i>
<i>Pseudonyms for interview participants (Students, Teachers and Industry)</i>	<i>C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23</i>	<i>23</i>

The study sample consisted of 20 students who are currently involved in the Digital Tutorship Programme in the faculty of education, with a mean range of 10 and 3 tutors. The demographic exhibited a diverse age range, with participants(students) ranging from 19 to 23 years and older and with participants(tutors) ranging from 25 to 27 years. Gender distribution within the sample reflected a predominantly female (students) composition, with 14 females, 6 males and 3 male tutors. To enrich the qualitative dimension of the research, a purposive sample of 20 students and 3 tutors was selected. The methodological approach facilitated a deeper understanding of the integration of Digital Tutorship for academic. The interviews provided deeper insights into the development of the tutorship programme through the integration of digital tools in teaching and learning.

Table 2. Research themes and research questions.

Research Question	Theme	Sub-theme
<i>1.1 How could digital tutorship be integrated as a form of academic support at a university in the Eastern Cape?</i>	<i>1 Integration of Digital Tutorship in Higher Education Support Systems</i>	<i>1 Enhancing student learning through technology-enabled academic support</i>
<i>1.2 What could be the perceived benefits and challenges of digital tutorship programmes in enhancing student learning outcomes?</i>	<i>2 Perceptions of Digital Tutorship in Student Learning</i>	<i>2 Balancing the benefits and challenges of technology-driven academic support</i>

Research question 1.1: How could digital tutorship be integrated as a form of academic support at a university in the Eastern Cape?

Theme 1: Integration of Digital Tutorship in Higher Education support systems.

Sub-theme 1: Enhancing student learning through technology-enabled academic support.

Participants (Students) responded as follows:

Participant C2: *"I think digital tutorship could be integrated by creating an online platform where we can access tutors anytime for academic queries"*.

Participant C4: *"The university could use WhatsApp or Telegram groups managed by tutors to provide us with quick academic support."*

Participant C6: *"I feel happy with incorporating digital tutorship into the Learning Management System (LMS) as we could have video tutorials and interactive sessions with tutors."*

Participant C7: *"Tutors could offer scheduled online office hours through Zoom or Microsoft Teams to help us as students with difficult concepts."*

Participant C12: *"Digital tutorship could include recorded video lessons that we may revisit when studying."*

Participant C17: *"Tutorship programmes could provide academic chatbots or AI tools that answer frequently asked questions, supported by human tutors when needed."*

Participants (Tutors) responded as follows:

Participant C1: *"Digital tutorship could be integrated by providing us as tutors with structured online platforms where we can host live Q&A sessions and upload supplementary learning resources for students."*

Participant C2: *"To make digital tutorship effective, we should receive training in using digital tools so that we can deliver interactive lessons through platforms like Teams or Moodle."*

Participant C3: *"Integration should focus on a blended approach where we can support students online through forums, emails, and recorded sessions, while also being available for face-to-face consultations when needed."*

Research question 1.2: What could be the perceived benefits and challenges of digital tutorship programmes in enhancing student learning outcomes?

Theme 2: Perceptions of Digital Tutorship in Student Learning.

Sub-theme 2: Balancing the benefits and challenges of technology-driven academic support.

Participants (Students) responded as follows:

Participant C5: *"One benefit is that I can access help anytime, especially when struggling after hours, but the main challenge is poor internet connectivity in my area."*

Participant C11: *"Digital tutorship makes learning flexible because I don't always have to be on campus."*

Participant C16: *"I think it would improve understanding since tutors can share videos and notes that we can revisit."*

Participant C19: *"Digital tutorship could allow us to collaborate with other students easily, which boosts engagement."*

Participant C 39: *"The benefit is personalised support through digital platforms that can track our progress."*

Participants (Tutors) responded as follows:

Participant C 1: *"A key benefit is that digital tutorship allows us to reach more students beyond the classroom, but a challenge is that some may not actively participate in online sessions."*

Participant C 2: *"Digital platforms give us the ability to share resources quickly and monitor progress more effectively, although internet instability makes consistent engagement difficult."*

Participant C 2: *"The main benefit is flexibility, since we can support students at different times."*

6. Discussion

Students and tutors viewed digital tutorship as a practical academic support mechanism in Eastern Cape universities. Students suggested embedding it via online platforms for real-time queries (C2) or LMS tools for videos and sessions (C6), aligning with global innovative models (Menshikova et al., 2025). Tutors emphasised structured platforms for sessions and resources (C1), akin to European TAPs (Chugh et al., 2023), with training needs echoing faculty development calls (Kerkhoff & Makubuya, 2022).

Participants (C7, C3) favoured blended models using Teams/Zoom alongside face-to-face, mirroring UNISA's tutor model (Ntuli, 2020). The Eastern Cape could benefit from hybrid approaches with WhatsApp, Telegram, and LMS, prioritising tutor capacity-building.

Benefits included accessibility beyond lectures (C5), off-campus access (C11), resource revisitation (C16), peer collaboration (C19), and progress tracking (C39), supporting flexibility (Antoniadis et al., 2022), independent learning (Munna et al., 2024), and inclusive models (Deol & Kaur, 2024).

Challenges encompassed connectivity (C5), unequal participation, and engagement (C1), reflecting African hybrid constraints (Menshikova et al., 2025; Chugh et al., 2023) and South African equity needs (Rwodzi & De Jager, 2021).

7. Conclusion

The study examined the integration of digital tutorship for academic support at a university in the Eastern Cape, highlighting the benefits, challenges, and lessons emerging from the process. The study revealed that digital tutorship significantly enhances student engagement, access, and equity, with high levels of student motivation and participation attributed to hybrid and technology-supported tutorials. Furthermore, digital platforms improved the provision of personalised feedback and academic guidance, reinforcing their role in promoting student success in higher education.

However, the study also identified persistent challenges such as faculty preparedness, tutor training gaps, connectivity issues, and resource limitations, which may undermine the effectiveness of digital tutoring if left unaddressed.

8. Recommendations

The study recommends that universities could implement mandatory digital pedagogy training and professional development for tutors and lecturers to enhance digital literacy, technical skills, and pedagogical readiness for effective digital tutorship integration. The researcher recommends an improved infrastructure by providing reliable internet, affordable data, and easy-to-use digital tools to support rural and disadvantaged students. Institutions could also expand tutor training and support by providing regular workshops and mentorship initiatives that equip tutors with both technical and soft skills, enabling them to effectively engage diverse students in hybrid environments. Learning platforms and resources should be designed to promote inclusivity and multilingualism by incorporating culturally relevant and language-sensitive options, thereby fostering equity and broadening student participation in multilingual regions such as the Eastern Cape.

References

- Alenezi, M. (2023). Digital learning and digital institution in higher education. *Education Sciences*, 13(1), 88. <https://doi.org/10.30574/ijstra.2024.11.1.0283>
- Antoniadis, K., Zafiropoulos, K., & Mitsiou, D. (2022). Measuring distance learning system adoption in a Greek university during the pandemic using the UTAUT model, trust in government, perceived university efficiency and coronavirus fear. *Education Sciences*, 12(9), 625. <https://doi.org/10.3390/educsci12090625>
- Chugh, R., Turnbull, D., Cowling, M. A., Vanderburg, R., & Vanderburg, M. A. (2023). Implementing educational technology in Higher Education Institutions: A review of technologies, stakeholder perceptions, frameworks and metrics. *Education and Information Technologies*, 28(12), 16403-16429.
- Deol, N. K., & Kaur, S. (2024). Academic Libraries as Social Hubs: Role in Reducing the Digital Divide among Students. *ACADEMIC LIBRARIES*, 301.
- Kerckhoff, S. N., & Makubuya, T. (2022). Professional development on digital literacy and transformative teaching in a low-income country: A case study of rural Kenya. *Reading Research Quarterly*, 57(1), 287-305.
- Mansour, N. (2024). Students' and facilitators' experiences with synchronous and asynchronous online dialogic discussions and e-facilitation in understanding the Nature of Science. *Education and Information Technologies*, 29(12), 15965-15997.
- Miles, C. (2021). *Facilitating pedagogical change in online learning in higher education through professional development*.
- Mohamed Hashim, M. A., Tlemsani, I., & Matthews, R. (2022). Higher education strategy in digital transformation. *Education and information technologies*, 27(3), 3171-3195. <https://doi.org/10.1007/s10639-021-10739-1>
- Munna, M. S. H., Hossain, M. R., & Saylo, K. R. (2024). Digital education revolution: Evaluating LMS-based learning and traditional approaches. *Journal of Innovative Technology Convergence*, 6(2).
- Ntuli, C. H. S. (2020). *An evaluation of the effectiveness of the integrated tutor model in Open and Distance Learning: A case of Unisa*. University of South Africa (South Africa).
- Nyongesa, W. J., & Van Der Westhuizein, J. (2025). *The impact of digital teaching tools on student engagement and learning outcomes in higher education in Africa*.
- Rwodzi, C., & De Jager, L. (2021). Remote learning as an option by resilient English teachers in Gauteng resource-constrained secondary schools. *Perspectives in Education*, 39(3), 62-78.
- Tran, K. N. P., Weng, C., Tran-Nguyen, P. L., Astatke, M., & Tran, N.-P.-D. (2024). What are tutors' perceptions of an online tutoring project Digital Learning Companion During the COVID-19 pandemic? A case study in Taiwan. *Universal access in the information society*, 23(3), 1409-1425.