

REFRAMING

TEACHING PRACTICE THROUGH VIRTUAL MENTORING

REPLANTEAR LA PRÁCTICA DOCENTE MEDIANTE LA TUTORÍA VIRTUAL

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ABSTRACT

This article explored the potential of virtual mentoring to revolutionise teaching practices in Zimbabwe. Its primary focus was to determine how virtual mentoring can effectively support trainee teachers' professional development to overcome the challenges of traditional mentoring practices. A qualitative approach was used, employing a case study design with a sample of 25 participants who took part in virtual mentoring programs. Data were collected through interviews and focus group discussions. Ten mentors were interviewed individually, and 15 trainee teachers were interviewed in focus group discussions. The study is informed by four virtual mentoring theories: media synchronicity, community of practice, social presence, and distributed cognition theory. The research findings suggest that virtual mentoring is a highly effective way to provide trainee teachers with access to a broader range of expertise and feedback while offering a more flexible and convenient way to receive support. Therefore, the study seeks to develop strategies and policies to enhance teacher development and help improve education outcomes in Zimbabwe, adding to the growing research on virtual mentoring and providing valuable insights to inform the design of mentoring programs in similar contexts.

Keywords: Teaching practice, Virtual mentoring, Trainee teachers, Mentors, Mentees

RESUMEN

Este artículo explora el potencial de la tutoría virtual para revolucionar las prácticas docentes en Zimbabwe. Su objetivo principal era determinar cómo la tutoría virtual puede apoyar eficazmente el desarrollo profesional de los profesores en formación para superar los retos de las prácticas tradicionales de tutoría. Se utilizó un enfoque cualitativo, empleando un diseño de estudio de caso con una muestra de 25 participantes que tomaron parte en programas de tutoría virtual. Los datos se recopilaban mediante entrevistas y grupos de discusión. Diez tutores fueron entrevistados individualmente y 15 profesores en prácticas fueron entrevistados en grupos de discusión. El estudio se basa en cuatro teorías de tutoría virtual: sincronización de medios, comunidad de práctica, presencia social y teoría de la cognición distribuida. Los resultados de la investigación sugieren que la tutoría virtual es una forma muy eficaz de proporcionar a los profesores en formación acceso a una gama más amplia de conocimientos y retroalimentación, al tiempo que ofrece una forma más flexible y conveniente de recibir apoyo. Por lo tanto, el estudio pretende desarrollar estrategias y políticas para mejorar el desarrollo del profesorado y ayudar a mejorar los resultados de la educación en Zimbabwe, sumándose a la creciente investigación sobre la tutoría virtual y proporcionando valiosos conocimientos para informar el diseño de programas de tutoría en contextos similares.

Palabras clave: Práctica docente, Tutoría virtual, Profesores en formación, Tutores, Alumnos.

INTRODUCTION

Zimbabwe's education sector has struggled due to insufficient resources, infrastructure, and teacher training opportunities (McNaught & Gravett, 2021). These challenges were compounded during the COVID-19 pandemic as schools were forced to close, and educators and students had to adapt quickly to remote learning. This increased the need for innovative approaches to teacher mentoring and professional development that can be delivered virtually. As a result, virtual mentoring became a much-needed solution to the challenges faced by teachers in Zimbabwe. Virtual mentoring is a flexible and cost-effective way to support teacher development, regardless of location or circumstance (Chimbi & Jita, 2023). It is emerging as a viable solution to the challenges posed by traditional face-to-face mentorship in education. Traditional face-to-face mentoring poses significant challenges regarding accessibility, cost, and availability of qualified mentors. Inversely, virtual mentoring provides a broader range of expertise and feedback, flexibility, and convenience, particularly relevant in Zimbabwe's context of scarce resources and vast geographical spread (Merriam, 2022).

Furthermore, virtual mentoring provides a convenient and effective way to support teacher development, promote professional growth, boost the quality of student education, and improve education outcomes. It uses online tools like video conferencing, chat messaging, and email to facilitate communication and collaboration between mentors and mentees. It offers personalised and collaborative professional development for teachers, which includes regular check-ins, feedback on lesson plans, and guidance on classroom management strategies, benefiting both novices and experienced educators (Mbhiza et al., 2024; Mitchell & Buntic, 2023). This mode overcomes traditional mentoring's logistical barriers and provides a customisable, technology-mediated learning experience (Moll et al., 2024). It can effectively bridge the gap between urban and rural areas and provide equal access to professional development in Zimbabwe. It can also solve teacher development challenges in Zimbabwe due to the shortage of qualified mentors in remote areas.

Despite abundant literature on traditional face-to-face mentoring in Zimbabwe, very little research has been conducted on virtual mentoring. Therefore, undertaking this study becomes crucial as policymakers and teachers can use these findings to identify feasible approaches to teacher development, especially in contexts where face-to-face mentoring may be impossible. It pinpoints the key factors that contribute to the success of virtual mentoring and provides practical recommendations for implementing virtual mentoring programs in teacher education. It

also contributes to the growing research on virtual mentoring in teacher education and offers valuable insights into how this innovative approach can facilitate teacher development. While this study is limited in scope to the Zimbabwean context, it has a broad reach. Many institutions, especially in the global south and remote areas, still grapple with relevant approaches to support trainee teachers. Thus, this article is guided by the following question: How can virtual mentoring effectively support trainee teachers' professional development to overcome the challenges of traditional mentorship practices?

Over the past decades, new technologies have emerged and transformed the educational landscape. With the evolution of technology, the mentorship process has also evolved to allow mentors to transfer their teaching skills to mentees virtually. In this sense, virtual mentorship has increased knowledge sharing, skill development, and career advancement opportunities for mentees (Smith et al., 2020). Smith and Johnson (2022) reported that virtual platforms often provide a more comfortable environment for mentees to seek guidance and feedback, enhancing mentorship satisfaction and effectiveness. Seyed et al. (2023) found that it leads to notable increases in confidence and self-efficacy. In contrast, Almond et al. (2020) added that it enhances career development and advancement, creating new opportunities and growth prospects. Similarly, Yosief et al. (2024) concur that it helps improve teaching practices, enhance teacher confidence, and promote professional growth. According to Almond et al. (2020) and Seyed and Zadhanas (2023) it enables mentees to acquire new skills and knowledge, correlates with increased academic satisfaction, favourable career advancements, retention rates and positioning them for goal achievement.

Scholars such as, Brown and Jones (2019) and Merriam (2022) assert that virtual mentoring provides exceptional accessibility and adaptability and transcends geographical constraints, allowing individuals to engage in mentorship programs irrespective of location and to connect regardless of time and place. Moreover, the asynchronous nature of virtual communication enables mentees to interact with mentors at their convenience, accommodating busy schedules, varying time zones and remoteness (Merriam, 2022; Wilson et al., 2020). Conversely, individuals in secluded locales, where traditional mentoring may be arduous or unfeasible, can now receive vital guidance and aid from the comfort of their residences. Mentees can engage with mentors at their discretion through virtual mentoring, including during weekends, evenings, and lunch breaks. This level of flexibility and accessibility ensures that mentees need not grapple with scheduling

conflicts or logistical impediments to access the requisite support (Brown and Jones, 2019). This adaptability amplifies mentee satisfaction and engagement while fostering inclusivity and diversity in mentoring. It heightens accessibility and flexibility compared to traditional face-to-face mentoring paradigms. Communication modalities extend from email and video conferencing to tailored online platforms, aligning with personal preferences and mentorship objectives (Smith and Johnson, 2022). Platforms for video conferencing, email, instant messaging, and collaborative workspaces are widely utilised to support all aspects of virtual mentorship, including regular meetings, document sharing, and feedback sessions (Smith and Johnson, 2022). Furthermore, integrating mentoring software with learning management systems streamlines administrative tasks and enhances the mentorship process overall (Wang et al., 2020).

Nonetheless, the practice of virtual mentoring has its pros and cons. A study by Brown and Jones, (2019) highlights technology-related issues such as network problems and software compatibility as significant hurdles in virtual mentoring. Seyed et al. (2023) state that frequent connectivity and technological issues can disrupt the mentorship process. Time zones and internet connectivity can also pose challenges, mainly if the mentor and mentee are located in different parts of the world or areas with poor internet connectivity. Moreover, the absence of face-to-face interactions can hinder the development of trust and relationships between mentors and mentees (Huang et al., 2020). Almond et al. (2020) and Seyed et al. (2023) maintain that language barriers and cultural disparities may hinder effective communication between mentors and mentees. Tovar-Correal and Pedraja-Rejas et al. (2025) research indicates that cultural sensitivity and understanding are necessary for cross-cultural mentoring relationships to be successful. Navigating customs, expectations, and communication styles that differ between mentors and mentees is essential for fostering learning and trust. It must be understood that different cultures have varied communication styles, influencing how mentors and mentees interact. For instance, some cultures prefer direct feedback, while others favour indirect feedback. Power dynamics, language barriers, cultural beliefs, values, and social norms shape virtual mentoring relationships. According to social identity theory, people are more likely to seek out mentors with similar experiences or backgrounds. Therefore, virtual mentoring initiatives must account for these social and cultural aspects. To establish a supportive and inclusive online community, mentors must be cognizant of these aspects and adjust their strategies to foster a conducive environment (Grothaus, 2022).

This study effectively incorporates the nuances of the Zimbabwean educational system, including geographical barriers and limited resources. Virtual mentoring can potentially address the gaps created by these challenges, especially in rural regions. For instance, areas like Mashonaland and Matabeleland, which are geographically isolated, face difficulties accessing in-person mentorship programs.

Numerous strategies have been proposed in the literature to surmount the challenges of virtual mentoring and establish a meaningful social presence. Strategic program design and implementing interactive tools to foster engagement are essential (Smith and Johnson, 2022). The selection and utilisation of appropriate communication tools and platforms are critical for the success of virtual mentoring programs (Wang et al., 2023). Studies by Kim and Lee (2021) emphasize the importance of user-friendly interfaces and secure platforms that facilitate seamless interaction and information exchange. Creating structured communication channels and establishing clear expectations for mentors and mentees can foster trust and rapport (Wang et al., 2023). Moreover, including icebreaker activities and regular check-ins can aid in cultivating relationships and fortifying the mentorship bond. Research conducted by Smith and Johnson (2022) advocates using video conferencing tools to simulate face-to-face interactions and enrich nonverbal communication cues. Using video conferencing and interactive tools is pivotal in amplifying the sense of presence, deciphering nonverbal cues, and promoting more personal interactions between mentors and mentees (Almond et al., 2020). Furthermore, virtual mentoring can be facilitated through various communication tools and platforms, such as online collaboration platforms, video conferencing software, and email. Leveraging these technologies, virtual mentoring relationships have the potential to thrive across time zones and geographical boundaries (Grothaus, 2022).

Strategies such as matching mentors and mentees based on compatibility are essential, as a strong relationship is built on shared values, interests, and goals (Seyed and Zadhasan, 2023). Furthermore, being approachable and available, demonstrating genuine interest and care, recognising cultural and social disparities, employing positive language and reinforcement, and demonstrating flexibility and adaptability are all crucial for cultivating a robust social presence in virtual mentoring relationships (Almond et al., 2020; Huang et al., 2020). Strong social presence can be achieved by maintaining regular and consistent communication (Seyed and Zadhasan, 2023). This practice is instrumental in fostering trust and engendering a sense of connection. Equally critical are active listening

and empathy, as these elements enable mentors to discern the needs and concerns of their mentees (Seyed and Zadhasan, 2023). Sharing personal experiences and anecdotes is an effective strategy for mentors to cultivate a rapport with their mentees, nurturing mutual understanding and connection (Huang et al., 2020). Establishing precise goals and expectations is paramount in furnishing a sense of direction and purpose, thus ensuring a productive and successful mentorship experience (Seyed et al., 2023). Additionally, aligning these goals with organisational objectives and individual career aspirations can enhance the effectiveness of virtual mentoring programs (Almond, 2023).

Furthermore, providing ongoing training and support for mentors and mentees can improve their ability to navigate virtual platforms and leverage technology for. Regular feedback and evaluation are also essential for growth and improvement, allowing mentors to adjust their approach and mentees to reflect on their progress (Seyed and Zadhasan, 2023). The mentor's ability to adapt to the virtual environment is also vital, enabling them to effectively utilize technology and facilitate a supportive online space (Seyed et al., 2023). The mentee's motivation and engagement are critical, as their enthusiasm and participation drive the mentorship forward (Seyed et al., 2023). By acknowledging and addressing these factors, virtual mentoring can become a powerful personal and professional development tool.

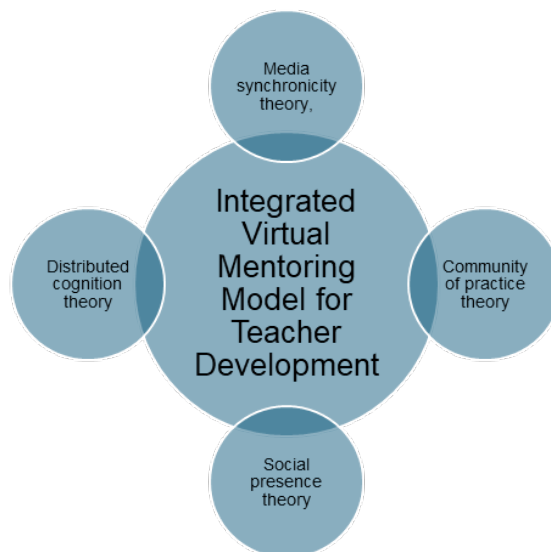
Although virtual mentoring may manifest problems related to technology, communication, and cultural differences, it also presents many opportunities for knowledge sharing, skill development, and career progression. Organizations can optimize the advantages of virtual mentoring and establish inclusive and meaningful mentorship experiences for participants by employing suitable tactics, utilising efficient communication instruments, and attending to cultural and social aspects (Almond et al., 2020). This study explores how virtual mentoring can support and provide insights into trainee teachers' professional development to overcome the challenges of traditional mentoring practices.

Theoretical Framework

The study is grounded in the Integrated Virtual Mentoring Model (figure 1), which incorporates four pivotal components: media synchronicity, a community of practice, social presence, and distributed cognition theories (Yosief et al., 2024). It emphasised the relevance of utilising multiple theories to guide and improve the efficacy of virtual mentoring practices. The model enhances communication, collaboration, and trust while harnessing technology to

extend cognitive processes. By integrating these components, the model provides a comprehensive approach to virtual mentoring within the teaching field.

Fig. 1: Integrated Virtual Mentoring Model for Teacher Development (IVMMTD).



source: taken from Irby (2020).

The media synchronicity theory emphasises choosing suitable communication tools and platforms to facilitate effective communication and collaboration between mentors and mentees. Video conferencing and other synchronous communication tools facilitate real-time interaction, creating a sense of presence and immediacy. The community of practice theory suggests that virtual mentoring can establish a community of practice for trainee teachers and mentors (Kirtchuk & Markless, 2024). This promotes continuous learning and development through shared activities and interactions. This framework highlights active participation and collaboration in the learning process, which can be facilitated through virtual mentoring (de Carvalho-Filho et al., 2020).

The social presence theory is also relevant. It explains how technology can create a feeling of presence and immersion in virtual environments. In this study, virtual reality and similar technologies can foster a sense of presence and immediacy, enhancing the mentoring experience (Grothaus, 2022). Finally, the distributed cognition theory suggests that learning and cognition are distributed among various elements within the learning environment, including individuals, tools, and artefacts. In this study, integrating communication tools and platforms can support the cognitive processes of mentors and mentees, enabling effective collaboration and problem-solving (Tovar-Correal

et al., 2025). By considering these theories, the study can design and implement effective virtual mentoring programs that recognise the importance of communication, collaboration, presence, and cognition in learning.

MATERIALS AND METHODS

Research Approach and Selection of Participants

The study employed a case study design within a qualitative approach. The choice of utilising a case study design in this research has been made due to its exceptional capacity to provide a comprehensive, contextualised understanding of the virtual mentorship program's impact on trainee teachers' teaching practices. Case studies offer a rich and nuanced understanding of the subject and facilitate a thorough investigation into complex issues. Furthermore, case studies serve as an effective tool for analysing real-world examples, enhancing the findings' relevance and applicability to real-world situations. Using purposive sampling, a study selected 25 participants who participated in virtual mentoring programs. In this study, purposive sampling was utilised to select participants with the capacity to offer comprehensive insights into the experiences of virtual mentoring in reframing teaching practices. This sampling procedure is well-suited for qualitative research as it enables selecting participants who can provide in-depth and detailed accounts of their experiences. The participants included ten mentors and fifteen trainee teachers, sometimes referred to as mentees, who were chosen to gain an understanding of their experiences and perspectives on the virtual mentorship program. The objective of this approach was to fully comprehend the program's impact on mentors and trainee teachers.

Data Collection Process

Data were collected from 25 participants in a virtual mentoring program via face-to-face interviews with mentors and focus group discussions with trainee teachers. Triangulation was employed, utilising two data collection methods to ensure the data's reliability and comprehensiveness (Barbour, 2014). Formulating the primary research questions and reviewing relevant literature directed the research inquiry, with input from a subject matter expert to confirm their validity. The researchers possessed prior knowledge of the research site and obtained the necessary permissions. Ethical considerations were upheld, with all participants providing voluntary consent and receiving assurances of anonymity before the commencement of the data collection process.

RESULTS AND DISCUSSION

The data obtained through face-to-face interviews with mentors and focus group discussions with trainee teachers were transcribed verbatim into textual data. Our research study used a qualitative methodology to examine data from mentors and trainee teachers engaged in virtual mentoring programs. Our data analysis followed Creswell and Poth's five-step process: managing and organising the data (data preparation), reading and memoing emergent ideas, describing and classifying codes into themes, developing and assessing interpretations, and verifying and validating the findings. This process enabled us to prepare the data by reviewing and cleaning the transcripts from the interviews and focus groups. We checked for accuracy and completeness and organised the data into a format suitable for analysis. Next, we described the data by providing an overview of the participants and their characteristics. Then, we coded the data by assigning labels or codes to the transcripts. After coding, we analysed the data using analytical techniques such as memoing, diagramming, and clustering. We identified relationships between the codes and themes and began to see the bigger picture of how virtual mentoring was reframing teaching practices. We ensured that the representation was accurate and transparent and reflected the voices and experiences of the participants. From this process six themes were developed: (1) Impact of Virtual Mentoring; (2) Challenges and limitations of virtual mentoring; (3) Factors Contributing to the Effectiveness of Virtual Mentoring (4) Accessibility and flexibility of virtual mentoring; (5) Use of communication tools and platforms; (6) Cultural and social factors in virtual mentoring. Interview reflection and member checks, triangulation, and comparison of the voice recording and field notes ensured the trustworthiness of the data.

Findings of the study

The study found that virtual mentoring positively impacts teacher development, improving teaching practices and self-efficacy. However, challenges such as technical issues and limited feedback were identified. Strategies to establish a social presence emerged as crucial for effective virtual mentoring. Additionally, the quality of the mentor-mentee relationship and clear goals were found to play significant roles. The research also highlighted the accessibility and flexibility benefits of virtual mentoring, especially for remote or underserved areas. It concludes that virtual mentoring is valuable for teacher development, but addressing challenges is crucial for successful outcomes.

Impact of Virtual Mentoring

Participants in this study reported that virtual mentoring significantly impacted teaching practice. According to Interviewee 1 (Mentor), virtual mentoring improved student engagement, better understanding of complex concepts, and enhanced collaboration with colleagues. Interviewee 2 (Mentor) found virtual mentoring rewarding and positively impactful. In contrast, in the focus group discussion, Participant 3 (trainee teacher) praised personalised support and valuable feedback from their virtual mentor, which improved their academic performance and confidence. Furthermore, Interviewee 1 (Mentor) explained, *"Virtual mentoring has provided a supportive environment for both students and Mentors. It has facilitated a stronger sense of community within our school, allowing us to work together and learn from one another."*

In an interview, the mentor unequivocally expressed admiration for the positive impact virtual mentoring has had on students by saying trainee teachers have become more engaged, motivated, and independent in their learning, leaving no room for doubt regarding their striving for success. The discussion also highlighted how virtual mentoring has facilitated and strengthened peer collaboration. One Trainee teacher confidently shared that it has helped them feel more connected to their teachers and classmates, allowing them to ask questions, seek guidance, and work together on projects. Overall, multiple participants emphasised the benefits of virtual mentoring over traditional face-to-face mentoring. The Trainee Teacher (13) stated, *"Virtual mentoring has improved my communication skills, both in expressing my needs and challenges and understanding the feedback and guidance provided by my mentor."* On the other hand, Trainee Teacher 14 added, *"The collaborative nature of virtual mentoring has encouraged me to engage actively with my mentor and fellow trainee teachers. We share resources, discuss strategies, and learn from one another's experiences."*

The impact of virtual mentoring on teaching practices has been profoundly positive. Teachers and mentors have witnessed enhanced student engagement, a more profound understanding of complex concepts, and a strengthened sense of collaboration. Virtual mentoring has facilitated a stronger sense of community within schools, benefiting trainee teachers, mentors, and peers. It has emerged as a powerful tool, surpassing traditional mentoring in transforming teaching practices and improving educational outcomes.

Challenges and limitations of virtual mentoring

The study's findings explored the challenges and limitations of virtual mentoring, such as technical difficulties,

limited personal interaction, time constraints, the lack of face-to-face interaction, and the need for mentors to adapt their communication styles. Addressing these challenges and finding innovative solutions can help improve the effectiveness of virtual mentoring programs for teachers. The participants come up with various challenges, as pronounced by Mentor 1, *"Virtual mentoring can be hindered by technical issues like poor video or audio quality, connectivity problems, or software glitches, which can disrupt communication and create frustration and disengagement."* Participants from the focus group postulated: *Sometimes, mentors and mentees may be in different time zones, making it challenging to schedule virtual mentoring sessions and leading to communication delays.*

One issue identified by the participants in the focus group discussion was the lack of face-to-face interaction in virtual mentoring. This can make establishing rapport and providing personalised support challenging. Mentees indicated that virtual communication can restrict the ability to observe nonverbal cues, such as body language and facial expressions, which may impact the accuracy and richness of communication. Furthermore, Grothaus (2022) supports that virtual mentoring relationships often involve sharing personal information and sensitive discussions, which can raise concerns about privacy and security.

Further challenges of virtual mentoring were identified by Trainee Teacher 17: *"While virtual mentoring has numerous benefits, technical issues can disrupt our sessions or make communication difficult. A stable internet connection and access to reliable devices are essential for a smooth experience."*

The focus group discussion participants discussed the limitations of virtual mentoring in depth. The trainee teachers argue that virtual mentoring lacks in-person observation and feedback, making it difficult to get guidance. On the other hand, mentors find it challenging to gauge the mentees' nonverbal cues and body language during virtual sessions. The study found that self-directed learning can be challenging for some individuals in virtual mentoring. Also, the cost of digital technologies and internet connectivity can be a barrier to virtual mentoring, despite being more cost-effective than traditional mentoring.

Factors Contributing to the Effectiveness of Virtual Mentoring

The study's findings on the effectiveness of virtual mentoring are consistent with the existing literature and all theoretical frameworks that emphasize the importance of establishing a solid rapport and trust in the virtual mentoring relationship. During the study, participants expressed various opinions. For instance, Interviewee 1 (Teacher)

mentioned that virtual mentoring provides flexibility to adapt to individual student needs and create personalized learning experiences, making it easier to connect at convenient times. Another interviewee, Interviewee 2 (Mentor), highlighted the accessibility of virtual mentoring as a critical factor. By removing geographical barriers, virtual mentoring enables mentors to connect with students who may not have had access to mentoring services otherwise. This has allowed them to reach more students and support those who need it most.

The study discusses the effectiveness of virtual mentoring, which is beneficial for students, teachers, and mentors. The relationships built through virtual mentoring are essential in guiding and supporting mentees (Moll et al., 2022). The study identifies several theories that explain the effectiveness of virtual mentoring, including media synchronicity, community of practice, social presence, and distributed cognition. Virtual mentoring platforms facilitate collaboration and communication, enabling students, teachers, and mentors to connect and work together seamlessly. Furthermore, virtual mentoring integrated into the curriculum creates a seamless learning experience and provides targeted support to students. The support provided by mentors has been invaluable in helping students overcome obstacles and achieve their academic goals. The study's findings are consistent with the Integrated Virtual Mentoring Model for Teacher Development, which provides a framework for understanding the role of virtual mentoring in teacher development and support. Virtual mentoring offers flexibility, allowing for personalized learning experiences and convenient scheduling for students and mentors (Yosief et al., 2024). The opinions expressed by the participants were in agreement, as demonstrated below:

Mentor 1 highlighted the importance of virtual mentoring's accessibility, stating that *it eliminates geographical barriers and allows us to connect with students who may not have had access to mentoring services otherwise*. This approach has enabled us to reach more students and support those who need it the most.

Trainee Teacher (Interviewee 3) emphasised the significance of the relationships built between a mentor and a student through virtual mentoring. A good mentor offers guidance, encouragement, and support when navigating challenges in and out of the classroom.

Trainee teachers (Focus Group Participant 1) observed that virtual mentoring tools have simplified connecting students, teachers, and mentors, promoting collaboration and communication towards common objectives. The study revealed that virtual mentoring has positively impacted

student engagement, understanding, and academic performance. Its flexibility and accessibility have enabled it to cater to individual student needs and reach a broader range of students. Virtual mentoring tools and platforms have enabled strong relationships between mentors and mentees by facilitating collaboration and communication. Integrating virtual mentoring into the curriculum provides targeted student support and a seamless learning experience. According to data analysis, virtual mentorship effectively promotes academic success for trainee teachers in Zimbabwe. The Media Synchronicity Theory and Community Practice Theory highlight the elements contributing to their growth through virtual mentorship. Participants stressed the importance of building trust with their virtual mentors. They appreciated timely and personalized feedback that focused on their specific needs.

Accessibility and flexibility of virtual mentoring

Virtual mentoring is undeniably accessible and flexible, as both research and literature have shown. It has revolutionised the mentoring experience for many Trainee teachers, allowing them to balance their teaching responsibilities and personal lives while benefiting from a mentor's invaluable guidance. The ability to control and shape their professional development is incredibly empowering. The responses of the participants are as follows:

Mentor 1 conveyed, *"Virtual mentoring has enabled me to support more trainee teachers than I could have through traditional face-to-face interactions. I can now share my experience and knowledge with a wider audience*. Trainee Teacher 3 stated, *"The one-on-one nature of virtual mentoring has allowed me to discuss my specific challenges and receive tailored advice from my mentor*. "In support of the above, Focus Group Participant (Trainee Teacher 4) indicated, *"I have found the feedback I receive through virtual mentoring to be more detailed and actionable than the general suggestions I have received in the past"*. Therefore, it is clear that virtual mentoring allows mentors to develop a stronger connection with each trainee teacher, which helps them provide more personalized support based on their individual needs. They also learn strategies and techniques which impact their teaching practice and, ultimately, their learning outcomes.

Some of the participants raised the following sentiments:

"Collaborating with a mentor has helped me identify areas where I can improve and implement new approaches in my classroom" (Trainee Teacher 6)."

"I have seen significant growth in the trainee teachers I have worked with through virtual mentoring. Their increased confidence and effectiveness as educators are

translating into better learning experiences for their students” (Trainee Teacher 3).

Interviewee: *“Even though we have never met face-to-face, my mentor and I have developed a strong rapport. Regular virtual meetings and consistent communication have helped us build trust” (Trainee Teacher 7).*

The icebreaker activities and informal conversations at the beginning of our virtual mentoring sessions helped create a comfortable environment for open and honest discussions (Trainee Teacher 8).

Focus Group Participant (Trainee Teacher: *“Building trust in a virtual setting requires consistent effort and effective communication. As a mentor, I actively listen to my mentees and provide them with the support they need to feel comfortable sharing their challenges and concerns.”*

The above response shows that most mentees and mentors found virtual mentoring more effective, saving time and increasing convenience, as it eliminates the need for physical travel between locations. However, the study revealed that effective communication and consistent effort are key to successful virtual mentoring.

Most study participants preferred virtual mentoring over face-to-face mentoring due to its flexibility and accessibility. Virtual mentoring proved particularly beneficial for trainee teachers in remote areas who lacked access to traditional mentoring. Participants reported that virtual mentoring helped them improve their teaching practices through mentor feedback and guidance and supported their professional development by providing reflection and skill development opportunities.

Use of communication tools and platforms

Most participants reported that using chat messaging, email, and video conferencing, among other platforms and communication tools, helped promote effective communication and collaboration during virtual mentoring. Positive responses were aired by Trainee Teacher 9 when saying, *“The video conferencing platform we use for our virtual mentoring sessions is user-friendly and allows for easy screen sharing, essential when discussing teaching materials or demonstrating techniques.”* Moreover, Trainee Teacher 10 said, *“Instant messaging apps have been beneficial. They allow me to quickly ask my mentor questions or share ideas without scheduling a full meeting. One of the mentors responded, “As a mentor, I find it important to be adaptable and familiar with various communication tools and platforms. This allows me to cater to the preferences and needs of each trainee teacher and ensure effective communication throughout our virtual mentoring relationship.”*

It can be summarised that participants valued personalized and timely feedback from their mentors, which helped them address specific areas for improvement. They also found that using various communication tools and platforms, such as video conferencing, chat messaging, and email, helped to facilitate effective communication and collaboration in virtual mentoring.

Cultural and social factors in virtual mentoring

Cultural and social factors influence virtual mentoring, as shown by one of the focus group participants (Trainee Teacher 11) when responding, *“Virtual mentoring has allowed me to connect with a mentor who shares my cultural background. This has been invaluable in helping me navigate challenges specific to our shared context and better serve my students.”* In addition, Trainee Teacher 12 said, *“Being part of a virtual mentoring program has exposed me to diverse perspectives and teaching approaches from mentors with different backgrounds and experiences. This has enriched my understanding of inclusive teaching practices.”*

Participants in a focus group discussion agreed that virtual mentoring provides an opportunity to discuss cultural and social factors that affect teaching practices openly. Trainee teachers appreciate personalized support and access from experienced educators, which helps them grow professionally and boosts their confidence in the classroom.

The research study deduced that establishing a social presence is crucial for effective virtual mentoring. Throughout the discussions, mentors and mentees recommended various strategies to enhance social presence in virtual mentoring. Using videoconferencing to improve communication and participation became prominent in the discussions. The literature also captured that mentor should encourage active involvement, ask questions, and share their thoughts and experiences during virtual mentoring sessions to increase engagement and connection with their mentees (Almond et al., 2020; Huang et al., 2020;).

Discussion of findings

The research suggested that virtual mentoring can significantly impact the professional development of trainee teachers in Zimbabwe, both during their training and as they progress in their careers. Virtual mentoring offers continuous support and guidance from experienced mentors, overcoming geographical barriers to assist even in remote or underserved areas (Seyed et al., 2023). This support has enhanced trainee teachers' teaching skills, confidence, and belief in their abilities as educators (Choudhary et al., 2024). By leveraging technology

to transcend geographical constraints, virtual mentoring has revolutionised traditional mentorship models, improving accessibility for participants. Previous studies (Smith et al., 2020) have demonstrated the substantial influence of virtual mentoring on both mentors and mentees. Online platforms encourage knowledge sharing, skill development, and career advancement, leading to increased participant satisfaction.

However, virtual mentoring still faces several challenges. Connectivity issues, software compatibility problems, and the lack of face-to-face interaction present significant barriers to effective mentorship (Brown & Jones, 2019; Huang et al., 2020). These challenges can impede the building of relationships and the development of trust between mentors and mentees, ultimately affecting the quality of the mentorship experience. In online mentoring settings, differences in cultures and misunderstandings in communication could be intensified, highlighting the importance of mentors being culturally sensitive and aware when interacting with mentees from various backgrounds.

In order to overcome these challenges and establish a meaningful social presence in virtual mentorship relationships, organisations can utilise various strategies supported by the literature. Research has shown that video conferencing tools and structured communication channels can simulate face-to-face interactions, fostering trust and rapport (Wang et al., 2023;). Furthermore, including ice-breaker activities and regular check-ins can help facilitate relationship building and strengthen the mentorship bond (Smith and Johnson, 2022). The research has identified several crucial components, including mentor availability and responsiveness, matching mentorship goals with organisational objectives, and providing ongoing training and support for mentors and mentees (Choudhary et al., 2024).

Virtual mentoring is an attractive option for those seeking mentorship due to its accessibility and flexibility. Through virtual platforms, geographical barriers are eliminated, allowing individuals to participate regardless of location (Brown and Jones, 2019). Furthermore, the asynchronous nature of virtual communication accommodates diverse schedules and time zones, promoting inclusivity and diversity in mentorship initiatives (Wilson et al., 2020). Effective use of communication tools and platforms is crucial for the success of virtual mentoring programs. User-friendly interfaces, secure platforms, and integration with learning management systems enhance the overall mentorship experience (Kim and Lee, 2021; Wang et al., 2020).

Recognising that cultural and social factors significantly influence the formation of virtual mentoring relationships

is crucial. Fostering trust, understanding, and collaboration among participants requires a deep commitment to cultural sensitivity and awareness and promoting diversity and inclusivity (Tovar-Correal and Pedraja-Rejas, 2025). The findings of this study highlight the potential of virtual mentoring to transform teacher education. It suggests that teacher training institutions integrate virtual mentoring into their programs, ensuring trainee teachers have the necessary skills to engage in remote learning and collaboration. Furthermore, policymakers and educational stakeholders should invest in technological infrastructure and professional development initiatives to facilitate the successful implementation of virtual mentoring in Zimbabwean schools. The study comprehensively understood the challenges, strategies, and factors related to virtual mentoring. The insights gained from these themes can inform policies and practices to enhance virtual mentoring experiences and improve teacher education outcomes.

Furthermore, findings emphasise the importance of embracing virtual mentoring to enhance teaching practices and promote continuous professional development. By addressing the challenges and investing in the necessary resources, virtual mentoring can significantly contribute to the quality of teacher education and ultimately improve student learning outcomes. Virtual mentoring presents numerous prospects for professional growth and knowledge exchange. However, it also poses challenges that require resolution through effective strategies and support mechanisms. By capitalising on technology, fostering cultural sensitivity, and offering continuous training and support, organisations can optimise the efficacy of virtual mentoring initiatives and cultivate meaningful mentorship experiences for participants. As technology progresses, virtual mentoring stands poised to play a pivotal role in bolstering individuals' career advancement and personal development globally.

CONCLUSION

This study explored virtual mentoring's potential to enhance teaching practices in Zimbabwe, revealing its significant benefits in increasing access to mentoring support, personalized feedback, and guidance. Consequently, these findings have crucial implications for teacher education and policy, highlighting the need to integrate virtual mentoring into teacher development strategies and formulate supportive policies. Furthermore, establishing rapport and trust, providing timely feedback, and utilizing diverse communication tools are essential for virtual mentoring's effectiveness. While the study showcases virtual mentoring's transformative potential, further research is necessary to examine its sustainability and scalability,

particularly in resource-constrained environments. Future studies should investigate long-term effects on teacher retention, professional development, and educational outcomes, as well as develop frameworks accounting for cultural and contextual factors to enhance virtual mentoring's efficacy. Ultimately, successful implementation requires a supportive infrastructure, including comprehensive training, clear guidelines, and stakeholder collaboration, with the Integrated Virtual Mentoring Model serving as a valuable resource for fostering meaningful relationships and promoting teacher growth.

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