E-Journal of Humanities, Arts and Social Sciences (EHASS)
ISSN – Online 2720-7722 | Print 2821-8949
Volume 6 Issue 11 2025 pp 2755 - 2766
Available online at: https://noyam.org/journals/ehass/
DOI: https://doi.org/10.38159/ehass.20256113

Virtual Mentoring in Teacher Education: A Low-Resource Country Perspective

Rosemary Madzore [1]
[1] University of South Africa, Pretoria, South Africa.

ABSTRACT

This study examines the application of virtual mentoring in teacher education to evaluate its effectiveness as a resource in countries with limited financial resources. These nations have faced significant challenges in their economic sectors, resulting in a brain drain and a surge in the hiring of inexperienced educators. Virtual mentoring has emerged as a viable solution for the widespread development of teaching talent. The research is based on the notion that developing nations can leverage virtual mentoring to enhance education quality if implemented effectively. Utilising a qualitative research methodology with an exploratory framework, the study found that virtual mentoring promises to boost teachers' confidence and foster their leadership qualities, leading to a deeper understanding of the subject matter. It was also discovered that virtual mentoring is particularly effective in resource-constrained countries, as it facilitates multiple mentoring sessions and enables mentors to support a greater number of teachers compared to traditional in-person visits. The study concludes that virtual mentoring has the potential to resolve the longstanding issue of training mismatches in the teaching profession in developing countries. It advises establishing robust telecommunication networks in rural regions to ensure that rural educators can access virtual mentoring, helping decrease teacher turnover and promote retention. This study will provide valuable insights for education practitioners on achieving workforce development and educational goals through virtual platforms, particularly in resource-constrained environments.

Keywords: *Telecommunication, Leadership, Profession Mismatch, Brain-Drain, Developing Country*

Correspondence
Rosemary Madzore
Email:
madzore@unisa.ac.za

Publication History
Received: 18th February, 2025
Accepted: 2nd July, 2025
Published online: 23rd October, 2025

To Cite this Article:
Madzore, Rosemary. "Virtual Mentoring in Teacher Education: A Low-Resource Country Perspective." *E-Journal of Humanities, Arts and Social Sciences* 6, no. 11 (2025): 2755 - 2766, https://doi.org/10.38159/ehass.20256113

INTRODUCTION

Educators play a pivotal role in any educational system, significantly impacting the quality of academic achievement.[1] Okeke and Okaforcha note that the functions of teachers are vital for efficient teaching and learning processes, as they are responsible for essential activities like lesson planning, effective lesson delivery, and thorough monitoring and evaluation of students.[2] Cui points out that access to quality education in rural regions has been consistently overlooked, and for many people around the world, growing up in rural areas often entails experiencing a subpar education. In numerous developing nations,

[1] J.A. Okeke-Ezenyanwu and I.M.V. Enwere, "Mentoring: A New Paradigm for Improving and Sustaining the Teaching and Learning of Business Education," *Multidisciplinary Journal of Vocational Education & Research* 5, no. 1 (2023): 1–14.
[2] Nonyem Ifediorah Okeke and Choice Chimaa Okaforcha, "Use of Digital Facilities as a Correlate to Effective Inspection of Public Secondary Schools in The Enugu Education Zone, Enugu State, Nigeria," *Unizik Journal of Educational Research, Science and Vocational Studies* 1, no. 1 (2025).

teaching is poorly compensated.[3] The types of teacher training provided at institutions are often outdated and conventional, relying on traditional lecture methods that typically result in rote memorisation and rarely address contextual realities or lead to practical outcomes.[4] Rural education is fundamental to rural development, essential for global alleviation of poverty.[5] The aim of reforming teacher education suggests that practising educators are central to the transformation of schools, and for them to spearhead reform efforts, they must be offered enhanced and expanded professional development opportunities.[6] Mentoring involves a relationship between a younger individual and an adult, where the adult offers support and guidance to help the youth achieve a specific goal or task.

Irby and Pugliese identify that virtual mentoring encompasses any mentoring activities that occur outside of face-to-face interactions.[7] In contemporary society, various communication tools are available to facilitate this form of mentoring, including Skype, telephone, email, and messaging applications. Fiannaca notes that virtual mentoring is grounded in practices developed for in-person scenarios, with processes that remain analogous as they entail two individuals engaging in a mentoring relationship, albeit from differing geographical locations.[8] Mentoring aims to enhance an individual's prospects of achieving their objectives by linking them to resources and support that may otherwise be inaccessible.[9] Organisations implement this strategy to promote effectiveness. Mentoring is characterised by the establishment of a personal relationship between educators possessing varying levels of professional skills and experience, designed to enhance the instructional and guidance capabilities of less experienced teachers.[10] The primary objective of mentoring is to support novice teachers in acquiring the necessary knowledge, enhancing their teaching skills, and providing mentors with the opportunity to share their expertise with beginners or mentees.[11]

Mentoring and teacher education play crucial roles in enhancing teachers' productivity and maintaining a favourable school climate.[12] Effective mentoring influences novice teachers' values, beliefs, and teaching skills, setting the stage for their careers.[13] Trained mentors assist new teachers with lesson planning, best practices, class observations, and feedback.[14] Establishing mentoring programs is vital for staff development, as it offers novice teachers a strong start while rewarding experienced teachers as mentors.[15]

However, rural teachers in remote areas often lack mentoring support due to limited internet access in developing countries.[16] This issue is particularly relevant in places like Zimbabwe, where there is a shortage of rural teachers and limited open-distance workforce development. While many studies focus on face-to-face mentoring, a notable gap exists in research on virtual mentoring in developing countries.[17]

---

[3] Mingkun Cui, "Rural and Remote Education for Rural Revitalisation in China," in *Handbook on Rural and Remote Education* (Edward Elgar Publishing, 2025), 251–64.

[4] Ziyad Belouahem, "Rote vs Meaningful Learning in EFL Classes: Perspectives and Beliefs" (Guelma-University, 2020), https://dspace.univ-guelma.dz/jspui/bitstream/123456789/10401/1/M821.277.pdf.

[5] Isaac Sarfo et al., "Why Is Rural Revitalisation Difficult to Achieve? An in-Context Discussion of Conceptual Barriers to China's 2018–2022 Strategic Plan," *Environment, Development and Sustainability*, 2024, 1–36.

[6] Martin Slattery, *Education Strategy in a Changing Society: Personalised, Smarter, Lifelong Learning in the 21st Century* (Routledge, 2024).

[7] Beverly J Irby and Elizabeth Pugliese, "Mentoring Takes on Different Forms as We Physically Distance, but Personally Engage," *Mentoring & Tutoring: Partnership in Learning* (Taylor & Francis, 2020).

[8] Natalie Fiannaca, " Empowering Educators: Perspectives and Confidence Levels of Teacher Candidates in Digital Media Literacy" (2024).

[9] Puji Mulyati, Dewi Apriyani, and Suriswo Suriswo, "Collaborative Strategic Mentoring Model to Improve Digital Learning Literacy Competencies (Google Meet and Canva) among School Principals," *Journal of English Language and Education* 10, no. 1 (2025): 248–56.

[10] Changhong Teng and Xuanwei Ma, "Is In-Person Mentoring Still a Must? Exploring Online Mentoring in Graduate Education through Descriptive and Variance Analysis," *Innovations in Education and Teaching International*, 2025, 1–16.

[11] J. Anyanwu and E. C. Abe, "Influence of Mentoring on Teachers' Instructional Delivery in Secondary Schools in Obio/Akpor Local Government Area," *International Journal of Education, Learning and Development* 11, no. 3 (2023): 12–24.

[12] Anyanwu and Abe, "Influence of Mentoring on Teachers' Instructional Delivery in Secondary Schools in Obio/Akpor Local Government Area."

[13] Irby and Pugliese, "Mentoring Takes on Different Forms as We Physically Distance, but Personally Engage."

[14] Anyanwu and Abe, "Influence of Mentoring on Teachers' Instructional Delivery in Secondary Schools in Obio/Akpor Local Government Area."

[15] Fiannaca, " Empowering Educators: Perspectives and Confidence Levels of Teacher Candidates in Digital Media Literacy."

[16] Teng and Ma, "Is In-Person Mentoring Still a Must? Exploring Online Mentoring in Graduate Education through Descriptive and Variance Analysis."

[17] Wilson Mugizi and Judith Irene Nagasha, "E-Learning," *Conceptualizations of Africa: Perspectives from Sciences and Humanities*,

Following the COVID-19 pandemic, distance learning has become essential for educational and workforce development in resource-limited countries.[18]

Various strategies have been implemented in developing countries to improve education systems. These include the introduction of new curricula aimed at decolonising education.[19] Moreover, the promotion of STEM education, along with other reforms focused on teacher training, is underway. In Zimbabwe, poor economic performance has led to a significant brain drain, with many teachers leaving the country in search of better opportunities.[20] This mass exodus has resulted in a workforce filled with inexperienced teachers who lack adequate training. Consequently, there is a pressing need for virtual mentoring and enhanced teacher education, especially as these new teachers are deployed across various provinces.[21] Pairing novice teachers with experienced mentors can significantly benefit the training and development of educators, especially in understanding the policies and regulations within the education system.[22] While teacher mentoring has been present since the early 1990s, advancements in technology have led to the development of virtual mentoring methods. However, their effectiveness remains unknown, particularly in resource-limited countries, and the causes, effects, and mitigation of brain drain in sub-Saharan Africa are not well understood.[23]

This research investigates the effectiveness of virtual mentoring and teacher training in developing nations, emphasising their role in rural development and poverty reduction. It assesses the success of virtual mentoring amid internet connectivity challenges and evaluates how digital technology can support novice teachers during their induction. The study also explores the significance of teacher education in fostering community development and alleviating poverty.

The research aims to enhance the current literature on the impact of virtual mentoring on educational systems in developing countries. Facilitating virtual interactions can reduce office congestion and travel costs for mentors and mentees. The findings will inform professional development initiatives for novice educators. Moreover, this study has the potential to influence social policy, offering alternative strategies for workforce development targeted at novice teachers. It will provide valuable insights for education practitioners on achieving workforce development and educational goals through virtual platforms, particularly in resource-constrained environments.

LITERATURE REVIEW

This section of the study provides a literature review to establish the discourse for this research, drawing on previous studies from journal articles and book chapters. The literature discussed here highlights mentoring and its significance in the teaching profession. Although novice teachers undergo training during their preservice programs, these teacher preparation initiatives often fail to equip them with all the knowledge and skills required for effective practice.[24] Many teacher education programs are now available to preservice teachers in various regional, rural, and remote areas.[25] Whether conducted face-to-face or virtually, mentoring is a developmental partnership among peers whereby one or more participants are

2025, 143–63.

[18] Leonorah Nyaruwata, "Teacher Development During and Beyond COVID-19: Perspectives from Zimbabwe," *Teacher Education through Flexible Learning in Africa (TETFLE)* 3, no. 1 (2022).

[19] D. R. Muzira and B. M. Bondai, " Perception of Educators towards the Adoption of Education 5.0: A Case of a State University in Zimbabwe," *East African Journal of Education and Social Sciences* 1, no. 2 (2020): 43–53; A. Matorevhu, " Curriculum Innovation Implementation for Industrialisation: A Case of Education 5.0 Preservice Science and Mathematics Teacher Preparation," *Journal of Research in Instructional* 3, no. 1 (2023): 69–86; Dairai Darlington Dziwa and Louise Postma, *Building Creative Capacities through Art Teacher Education in Zimbabwe* (Bulgarian Comparative Education Society , 2020).

[20] Clyde Kudzanai Gapa, "Zimbabwe Today Is Not Zimbabwe Tomorrow: Investigating Economic Prospects, Capacities, and Strategic Priorities for Enhancing Global Competitiveness.," *Capacities, and Strategic Priorities for Enhancing Global Competitiveness. (September 14, 2024)*, 2024.Mugizi and Nagasha, "E-Learning."

[21] Peter Mudungwe, "Migration Governance in Africa: Challenges and Opportunities," *African Human Mobility Review* 11, no. 1 (2025): 13–40.

[22] Nyaruwata, "Teacher Development During and Beyond COVID-19: Perspectives from Zimbabwe."

[23] Tandy Ombogo, "Causes, Effects & Mitigation of Brain Drain in Sub-Saharan Africa: An Annotated Bibliography," *Electronic Journal of Africana Bibliography* 17, no. 2 (2023).

[24] Babak Dadvand, Juliana Ryan, and Steve Murphy, "Context Matters: Rethinking Graduate Teacher Readiness for Hard-to-Staff Schools," *Teachers and Teaching*, 2025, 1–16.

[25] Jayne Downey and Jennifer Luebeck, "Place-Attentive Professional Learning for Rural and Remote Teachers," in *Handbook on Rural and Remote Education* (Edward Elgar Publishing, 2025), 80–93.

empowered to enhance their awareness, explore options, take action, and foster their personal growth.[26] This developmental approach emphasises personal and professional growth rather than focusing solely on functional processes and encourages the mentee's voice to facilitate shifts in perspectives and enhance self-awareness.[27] The introduction of challenges is designed to stimulate self-reflection and encourage the development of alternative viewpoints, as these elements can help both the mentor and mentee recognise signs that the relationship may lead to transformative and mutually beneficial growth.[28] Practitioners can receive support within their specific contexts to apply, enhance, and develop their knowledge and skills at their convenience.[29]

Virtual mentoring, also known as distance mentoring, remote mentoring, tele-mentoring, cyber-mentoring, and e-mentoring, is a practice where mentors support mentees through various digital platforms.[30] While tele-mentoring typically involves phone conversations, virtual mentoring utilises synchronous tools like webinars, Voice Over Internet Protocol (VoIP) platforms such as Skype, as well as text chat.[31] Asynchronous tools include emails, discussion forums, blog posts, and comments on posts.[32] Therefore, virtual mentors must possess well-developed digital citizenship skills and the skills required for face-to-face mentoring.[33]

A crucial aspect of professional education is providing students with meaningful, practical experiences.[34] For preservice teachers, teaching practice experiences allow them to observe the pedagogical strategies and classroom management techniques of experienced educators.[35] Hands-on experience helps them apply theoretical concepts and practical skills in real-life settings, understand the profession's language, and recognise a teacher's role within the school community.[36]

Electronic mentoring, or e-mentoring, combines traditional one-on-one mentoring with modern technology and is rapidly becoming a preferred method of mentoring, especially in virtual education, where time is often limited.[37] E-mentoring, which can occur via email, online chat rooms, electronic bulletin boards, or instant messaging, offers opportunities for virtual meetings when in-person sessions are unfeasible.[38] Downey and Luebeck have noted that virtual arrangements are fundamentally separate from a professional learner's work environment; however, for them to be effective, they must be integrated into the practitioners' ecological contexts and the educational activities they support.[39] Preservice teachers in rural and remote areas lack access to professional learning dialogues with teachers in their fields, as small rural high schools often do not have specialised Physics instructors.[40] An online mentoring initiative has been established to allow these rural and remote preservice teachers to connect with practising

[26] Mulyati, Apriyani, and Suriswo, "Collaborative Strategic Mentoring Model to Improve Digital Learning Literacy Competencies (Google Meet And Canva) among School Principals."
[27] Martin Mills et al., "Teacher Shortages: A Social Justice Perspective on an Australian Teacher Education Policy," *Teaching Education* 36, no. 1 (2025): 1–17.
[28] Marnie Harris et al., "Beyond the City Limits: Perceptions of Preservice Teachers Undertaking Professional Experience in Regional, Rural and Remote Schools: M. Harris et al.," *The Australian Educational Researcher* 52, no. 3 (2025): 2229–53.
[29] Bin Ai, Xueshan Li, and Guofang Li, "When City Meets Rural: Exploring Preservice Teachers' Identity Construction When Teaching in Rural Schools," *Sage Open* 12, no. 1 (2022): 21582440221079910.
[30] Oksana Ivanytska et al., "The Impact of Mentorship Programs Using Virtual Reality on Student Performance," *Journal of Theoretical and Applied Information Technology* 103, no. 2 (2025); Asiye Pınar Köksal Topcu, "Design, Implementation, and Evaluation of Remote Mentoring Practices for Technology Integration in Higher Education," *Kastamonu Education Journal* 33, no. 2 (2025): 286–303.
[31] Erika L Thompson et al., "Examining Educational and Career Transition Points among a Diverse, Virtual Mentoring Network," *Journal for STEM Education Research* 8, no. 1 (2025): 113–28.
[32] Dyah Mutiarin et al., "Analysis of E-Mentoring Platform for Future Leaders' Development: A Comprehensive Literature," in *E3S Web of Conferences*, vol. 440 (EDP Sciences, 2023), 03021.
[33] Topcu, "Design, Implementation, and Evaluation of Remote Mentoring Practices for Technology Integration in Higher Education."
[34] Shira Vidal and Miriam Kuckuck, "Preservice Teacher Action Competence in Education for Sustainable Development: A Scoping Review," *Sustainability* 17, no. 9 (2025): 3856.
[35] Muhammad Usman Tariq, "Innovative Mentoring Programs: Strategies for Success in Post-COVID-19 Education," in *Mentoring Students and Instructors for Retention and Success* (IGI Global Scientific Publishing, 2025), 123–58.
[36] Tim Fish et al., "'I Do Plan to Do That in the Future, Just Not the near Future': Rural Professional Experience Programs and Preservice Teacher Graduate Destination Preferences," *The Australian Educational Researcher* 52, no. 1 (2025): 431–47.
[37] Hilde Elisabeth Toreid et al., "Digital Peer Mentoring in Higher Education: Results from a Qualitative Study Involving Digital Part-Time Nursing Students," *Heliyon* 11, no. 4 (2025).
[38] Mills et al., "Teacher Shortages: A Social Justice Perspective on an Australian Teacher Education Policy."
[39] Downey and Luebeck, "Place-Attentive Professional Learning for Rural and Remote Teachers."
[40] Linlin Li et al., "Empowering Rural Students through Computational Thinking and Real-World STEM Applications: Insights from an Innovative High School Curriculum," in *Frontiers in Education*, vol. 9 (Frontiers Media SA, 2025), 1452470.

educators for both professional and academic growth.[41] This initiative offers online mentoring that transcends conventional educational limits to enhance support for preservice educators while fostering partnerships with in-field teachers.[42] Mudungwe contends that traditional teacher education programs do not adequately meet the current demands of teaching and often fail to reflect contemporary practices. The quality of initial teacher training and ongoing mentorship can significantly impact teacher competence and help reduce attrition rates in the profession.[43] Downey and Luebeck point out that many studies overlook the effectiveness of virtual mentoring as a support system for novice rural educators, who are at a greater risk of leaving the profession than their urban and suburban counterparts.[44] Virtual mentoring has emerged as a viable solution for resource-limited developing countries to strengthen teacher mentoring and decrease the turnover of rural educators. The potential of virtual mentoring lies in improving the quality of education provided by rural teachers, thus promoting rural development and alleviating poverty, as education plays a crucial role in rural advancement.

CONCEPTUAL AND ANALYTICAL FRAMEWORK

The study utilised the concept of mentoring as the framework for the article. Mullen and Klimaitis define mentoring as the intentional pairing of a more experienced individual with a less experienced one to facilitate the professional development of the latter, ultimately aiming to reduce teacher turnover.[45] Mukeredzi et al. describe mentoring as a one-on-one relationship between a competent, experienced teacher (mentor) and a novice or trainee (mentee).[46] According to Baker-Gardner, mentoring serves as a valuable tool to bridge the gap between training received at universities and the realities of practice.[47]

For an extended period, developing countries have produced graduates whose skills do not align with the demands of their jobs. Mentoring plays a crucial role in addressing this mismatch, resulting in well-equipped teachers. Additionally, virtual mentoring helps overcome geographical barriers, creating an inclusive system that allows for the mentorship of rural teachers and those in remote areas. Mundia and Iravo note that mentorship significantly increases productivity and teacher retention as educators reach their full potential.[48]

METHODOLOGY

This study employed a qualitative research approach, grounded in an exploratory research design, to investigate the emerging phenomenon of virtual mentoring in developing countries, with a specific focus on Zimbabwe. A qualitative approach was deemed most appropriate given the anthropological and contextual nature of the study. According to Creswell, qualitative research enables an in-depth exploration of complex social phenomena, especially in cases where existing knowledge is limited or underdeveloped.[49] Virtual mentoring in the context of developing countries remains a relatively under-researched area. As such, an exploratory qualitative design facilitated a comprehensive understanding of the dynamics, challenges, and opportunities surrounding its implementation.

The research utilised documentary analysis as its primary method for collecting data. The secondary data sources comprised peer-reviewed journal articles, book sections, institutional reports, and policy documents concerning virtual mentoring, digital inclusion, and the professional development of teachers in developing contexts. These resources offered valuable insights into existing models, theoretical

[41] Downey and Luebeck, "Place-Attentive Professional Learning for Rural and Remote Teachers."
[42] Dadvand, Ryan, and Murphy, "Context Matters: Rethinking Graduate Teacher Readiness for Hard-to-Staff Schools."
[43] Mudungwe, "Migration Governance in Africa: Challenges and Opportunities."
[44] Downey and Luebeck, "Place-Attentive Professional Learning for Rural and Remote Teachers."
[45] Carol A Mullen and Cindy C Klimaitis, "Defining Mentoring: A Literature Review of Issues, Types, and Applications," *Annals of the New York Academy of Sciences* 1483, no. 1 (2021): 19–35.
[46] Tabitha Grace Mukeredzi, Nonhlanhla Mthiyane, and Carol Bertram, "Becoming Professionally Qualified: The School-Based Mentoring Experiences of Part-time PGCE Students," *South African Journal of Education* 35, no. 2 (2015): 1057.
[47] R. Baker-Gardner, " A Proposed Model for the Induction of New Teachers in Jamaican Primary Schools," *International Journal of Education and Research* 2, no. 12 (2014): 283–96.
[48] Catherine Nyawira Mundia and Mike Iravo, "Role of Mentoring Programs on the Employee Performance in Organisations: A Survey of Public Universities in Nyeri County, Kenya," *International Journal of Academic Research in Business and Social Sciences* 4, no. 8 (August 24, 2014), https://doi.org/10.6007/IJARBSS/v4-i8/1110.
[49] John W Creswell, "Reflections on the MMIRA the Future of Mixed Methods Task Force Report," *Journal of Mixed Methods Research* (Sage Publications, Sage CA: Los Angeles, CA, 2016).

frameworks, policy considerations, and contextual obstacles affecting virtual mentoring efforts.[50] Utilising documentary sources was suitable for this study since it facilitated data triangulation and a more comprehensive understanding of both global and local viewpoints on the topic.

Thematic analysis was employed to analyse the collected data. This process entailed systematically identifying, coding, and interpreting patterns or themes throughout the data sources. The six-phase framework for thematic analysis outlined by Clarke and Braun guided this procedure: familiarisation with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and preparing the final report.[51] This approach enabled the organisation of intricate qualitative data into meaningful themes that highlighted significant insights regarding the role, potential, and limitations of virtual mentoring in addressing educational inequalities, especially for teachers in rural areas.

Additionally, the methodology recognised the contextual factors that affect virtual mentoring, such as technological infrastructure, digital literacy, the policy environment, and socio-economic conditions. When interpreting the findings, these contextual elements were carefully considered to ensure the study's relevance and applicability to the Zimbabwean context and the wider developing world.

PRESENTATION OF FINDINGS

The study aimed to understand the effectiveness of virtual mentoring and teacher education in resource-limited countries, as well as to determine if this strategy can reduce rural teachers' dissatisfaction with the teaching profession. The study revealed two themes: 1. the effectiveness of virtual mentoring, which points to the successes of virtual mentoring, and 2. challenges and barriers rendering virtual mentoring ineffective.

Effectiveness of Virtual Mentoring

Henriques et.al. observe that in Mozambique, new technologies necessitate a rethink of education's pedagogical paradigm, as virtual mentoring has strengthened the bonds of interaction between different actors in a network. [52]Tisdell et al. and Tariq have observed that training teachers using new technologies is a way to enable individuals who are unable to attend a face-to-face course to acquire qualifications for professional development in their area of intervention, allowing for greater contact, knowledge, and development in the construction of new skills vis-à-vis the profession.[53]

David and Kim observe that virtual mentoring and teacher education in Mozambique have been effective, as teachers have mastered the content and become innovative.[54] This presupposes that they have undergone training in distance learning, which has equipped them with competencies in content mastery.

Teixeira et.al. observe that in Mozambique, virtual mentoring is effective, as activities carried out on platforms contribute to the acquisition of knowledge in cyclical activities, allowing the acquisition of other skills, such as innovation, creativity, rigour, and mastery of content to be taught.[55] Motsamai and Alers observe that in the Kingdom of Eswatini, virtual mentoring has been implemented across primary to tertiary institutions to facilitate the drive to integrate technology in teacher training, thereby transforming instructional pedagogies in teacher education.[56] Mendenhall observes that virtual training has been practical in training teachers in the Kakuma refugee camp in Kenya.[57] The provision of mentoring through WhatsApp for six months to groups of 4-5 teachers' mentorship entailed problem-

[50] Elizabeth J Tisdell, Sharan B Merriam, and Heather L Stuckey-Peyrot, *Qualitative Research: A Guide to Design and Implementation* (John Wiley & Sons, 2025).

[51] Virginia Braun and Victoria Clarke, "Using Thematic Analysis in Psychology," *Qualitative Research in Psychology* 3, no. 2 (2006): 77–101.

[52] Susana Henriques et al., "Online Training of Trainers from the Open University, Portugal," *EDEN Conference Proceedings* 1 (2015): 798–804.

[53] Tisdell, Merriam, and Stuckey-Peyrot, *Qualitative Research: A Guide to Design and Implementation*; Tariq, "Innovative Mentoring Programs: Strategies for Success in Post-COVID-19 Education."
C. David and C. Kim, " Mentoring Practices in Secondary Schools: Perceptions of Mentors and Preservice Teachers in Mozambique," *Innovation and Education* 5, no. 1 (2023): 54–80.

[55] P. R. D. S. M. Teixeira et al., " A Preceptoria e o Ensino Do Autocuidado Do Diabético: Das Dificuldades Aos Caminhos Possíveis Preceptorship and the Teaching of Diabetic Self-Care: From Difficulties to Possible Paths," *Saúde Em Redes* 7, no. 3 (2021): 41–54.

[56] M W Motsamai and C Alers, "Teachers' Perspectives on the Effects of Free Primary Education Policy of the Kingdom of Eswatini on Education Quality in Public Schools," *African Journal of Public Affairs* 13, no. 1 (2022): 79–96.

[57] Mary Mendenhall, "Teachers for Teachers: Advocating for Stronger Programs and Policies for and with Refugee Teachers in Kakuma Refugee Camp, Kenya (Dispatch)," *Studies in Social Justice* 12, no. 2 (2018): 356–63.

solving and experience sharing. This helped novice teachers build confidence. Cilliers observed that in South Africa, virtual mentoring presents the possibility of lowering the cost of providing support to teachers on a large scale, as an expert trainer can reach more teachers virtually than through in-person visits or training.[58]

Challenges and Barriers to Virtual Mentoring

Cilliers observed that virtual mentoring in South Africa was implemented but proved less effective due to technological barriers in some rural areas.[59] Downey and Luebeck noted that e-mentoring in Africa faces several challenges that weaken its effectiveness; many African countries struggle with internet connectivity issues, even within tertiary institutions, and have inefficient ICT-related infrastructure, including problems with electricity, telecommunications, and computer access.[60] Mathai and Arumugam found that virtual mentoring and teacher education in Burundi, Ethiopia, South Sudan, Niger, and Somalia suffer from a lack of internet penetration, with only 2% of the population in these countries having internet access.[61] This situation sidelines most rural teachers and adversely affects teacher retention.

Toreid et.al. reported that virtual mentoring was not very effective in the Kakuma refugee camp, primarily due to inconsistent connectivity and unreliable access to electricity, which led to delays and reduced responsiveness.[62] Chigora et al. noted a rise in the use of e-learning platforms in Zimbabwe for both individual and group learning, utilising synchronous and asynchronous methods.[63] However, concerns have been raised regarding the effectiveness of these platforms, as the transition to virtual learning may contribute to an increase in unethical classroom behaviours. Naman et al. highlighted that the absence of locally developed resources poses a significant obstacle to virtual mentoring in Eswatini, where English proficiency is notably low.[64]

In this section of the study, the researcher examines the findings related to the effectiveness of virtual mentoring in developing countries, specifically linking them to lessons applicable to Zimbabwe.[65] The study showed that virtual mentoring helps bridge the divide between traditional face-to-face interactions and technological advancements, enabling individuals in remote areas to obtain qualifications.[66] Virtual mentoring facilitates teacher retention by allowing educators to enhance their qualifications through structured activities that promote innovation, creativity, rigour, and mastery of the content to be taught. Supporting this study, Andersen and Wellen emphasise that offering virtual mentoring to teachers is vital for developing competencies.[67] In agreement with this research, Lee argues that virtual mentoring effectively leverages technology to provide a personal touch, connecting virtual learning with real-world experiences.[68] Corresponding with the study findings, various scholars argue that virtual mentoring serves not only as a source of knowledge but also as a co-creator of content, benefiting both mentors and mentees in their development.[69] The study's findings indicate that virtual mentoring effectively bridges the gap between traditional mentoring and technological advancements, enabling

[58] Jakkie Cilliers, *The Future of Africa: Challenges and Opportunities* (Springer Nature, 2021).
[59] Cilliers, *The Future of Africa: Challenges and Opportunities*.
[60] Downey and Luebeck, "Place-Attentive Professional Learning for Rural and Remote Teachers."
[61] R. Mathai and T. Arumugam, "Preference and Promotion of E-Learning as a Training Medium in the Hospitality Industry, with Special Reference to Four- and Five-Star Hotels in Tamil Nadu, India," *International Journal of Business Administration* 7, no. 3 (2016): 91–100.
[62] Toreid et al., "Digital Peer Mentoring in Higher Education: Results from a Qualitative Study Involving Digital Part-Time Nursing Students."
[63] Farai Chigora et al., "Transferability of Governance Ethics in the Fourth Industrial Revolution Teaching and Learning Developments: A Distanced Higher Education Assessment in Zimbabwe amid COVID-19 Pandemic," in *Responsible Management of Shifts in Work Modes–Values for a Post Pandemic Future, Volume 1* (Emerald Publishing Limited, 2022), 179–95.
[64] Sean M., Naman et al., "Bioenergetic Habitat Suitability Curves for Instream Flow Modelling: Introducing User-friendly Software and Its Potential Applications," *Fisheries* 45, no. 11 (2020): 605–13.
[65] Mudungwe, "Migration Governance in Africa: Challenges and Opportunities."
[66] Ivanytska et al., "The Impact Of Mentorship Programs Using Virtual Reality On Student Performance"; Topcu, "Design, Implementation, and Evaluation of Remote Mentoring Practices for Technology Integration in Higher Education."
[67] T. S. Andersen and H. Wellen, " Being a Mentor in the Digital Era: An Exploratory Study of the Benefits Undergraduate Student Mentors Derive from Providing Virtual Mentoring to Youth," *Journal of Community Psychology* 51, no. 7 (2023): 2635–51.
[68] R. R. Lee III, " Investigating Learning and Development Professional Best Practices for Designing and Implementing Virtual Communities of Practice " (University of Arizona Global Campus, 2024).
[69] Thompson et al., "Examining Educational and Career Transition Points among a Diverse, Virtual Mentoring Network."A., Haleem et al., "Understanding the Role of Digital Technologies in Education: A Review," *Sustainable Operations and Computers* 3 (2022): 275–85; Mugizi and Nagasha, "E-Learning."

distance learning and enhancing teacher retention while improving content mastery and job satisfaction. Developing nations like Zimbabwe could leverage virtual mentoring to address the brain drain that has been experienced over the years.

The study indicated that virtual learning is successfully training and transforming teaching methods within teacher education in developing countries.[70] The research revealed that virtual mentoring boosts the confidence of novice educators while providing mentors with new experiences that can enhance their skills. Fiannaca supports these findings, noting that virtual mentoring facilitates the efficient transfer of valuable skills to mentees and helps them gain the confidence needed to overcome leadership challenges and foster self-reliance.[71] Irby and Pugliese affirm that virtual mentoring effectively builds confidence, a crucial component of professionalism for both mentors and mentees, promoting knowledge and skill development, as well as social capital, through collaborative learning and decision-making.[72] The study illustrated that communication technologies like WhatsApp are utilised effectively to support virtual mentoring, which aids in teacher retention and training proficiency, given that teacher education programs typically provide only fundamental training. Virtual mentoring in teacher education offers rural teachers and those in geographically remote areas the opportunity to enhance their qualifications and master the educational content required by the system. Moreover, the study found that virtual training in resource-limited countries effectively reduces the costs of providing support to teachers, as trainers can reach a larger number of educators virtually compared to in-person visits. Haran and Jayaraj support the study's findings, indicating that virtual mentoring is effective because it enables mentors and mentees to communicate from any location, thereby overcoming distance barriers and facilitating multi-mentoring opportunities.[73] Virtual mentoring represents a meaningful approach to talent retention and development in teaching that Zimbabwe could adopt to enhance teacher qualifications and better manage human resources. Zimbabwe can learn from other developing nations to improve talent development while effectively retaining its teachers.

The research indicated that there are obstacles in virtual mentoring that reduce its effectiveness for developing nations with inadequate telecommunication infrastructure. It was found that virtual mentoring is ineffective in developing countries due to a lack of connectivity, particularly for many rural teachers living in remote areas that are difficult to connect with online. Iqbal noted that e-mentoring is less effective when connectivity issues are prevalent in many developing countries due to insufficient telecommunications infrastructure.[74]

Supporting these findings, Talbert et.al. observed that weak internet connections can impede the effectiveness of virtual mentoring in developing countries, particularly affecting rural educators and those in isolated regions.[75] The research demonstrated that virtual mentoring is less successful in developing nations because of unethical and unprofessional practices in virtual classrooms. The findings revealed that the absence of locally tailored content detracts from the effectiveness of virtual mentoring in developing countries. Kernan et al. support these findings by stating that unprofessional behaviour from some mentors can render virtual mentoring ineffective, as it may lead to the sexual harassment of mentees.[76] Zimbabwe has the potential to implement virtual mentoring while addressing its shortcomings by enhancing telecommunication infrastructure and establishing a robust legal framework for cyber ethics that enforces orderly virtual interactions.

[70] Teng and Ma, "Is In-Person Mentoring Still a Must? Exploring Online Mentoring in Graduate Education through Descriptive and Variance Analysis."
[71] Fiannaca, " Empowering Educators: Perspectives and Confidence Levels of Teacher Candidates in Digital Media Literacy."
[72] Irby and Pugliese, "Mentoring Takes on Different Forms as We Physically Distance, but Personally Engage."
[73] V. V., Haran and A. Jeyaraj, " Organisational E-Mentoring and Learning: An Exploratory Study," *Information Resources Management Journal (IRMJ)* 32, no. 1 (2019): 58–72.
[74] H. Iqbal, " E-Mentoring: An Effective Platform for Distance Learning," *E-Mentor* 84, no. 2 (2020): 54–61.
[75] Patricia Y., Talbert et al., "Challenges and Strategies of Successful Mentoring: The Perspective of LEADS Scholars and Mentors from Minority Serving Institutions," *International Journal of Environmental Research and Public Health* 18, no. 11 (2021): 6155.
[76] J. Kernan et al., " Virtual Mentorship of Teacher Leaders: The Ripple Effect," *Journal of Mathematics and Science: Collaborative Explorations* 17, no. 1 (2021): 14.

RECOMMENDATIONS

The study's findings indicate that virtual mentoring proves effective in developing countries, as it decreases the costs of further training for teachers, allowing them to learn during their free time without needing to be physically present, thus overcoming geographical obstacles. However, the research also suggests that virtual mentoring may be less effective for rural teachers in remote areas lacking quality telecommunications infrastructure. The study advocates for policies that enhance virtual mentoring by improving rural communication infrastructure to boost teacher retention. It also suggests providing locally appropriate content for mentoring educators. The study calls for a comprehensive revision of policies aimed at developing telecommunications systems in rural areas to provide affordable internet access. Furthermore, it recommends utilising cost-effective communication methods to facilitate mentoring. Lastly, the study proposes the mandatory mentoring of novice teachers to enhance content mastery and foster team leadership among educators, leading to overall development.

CONCLUSION

The study aimed to gain insights into the efficacy of virtual mentoring in resource-limited countries and explore how it can be implemented in developing nations, which the study successfully achieved. The findings indicated that virtual mentoring is beneficial in developing countries as it reduces the expenses associated with mentors travelling for in-person sessions across various regions. Additionally, the research demonstrated that virtual mentoring enables teachers in isolated areas to obtain qualifications they would not achieve without such support, consequently enhancing teacher retention and job satisfaction. From this study, it can be inferred that resource-limited countries are facing a loss of teachers and professionals due to socio-economic challenges, as the promises of independence have not materialised, resulting in the suffering of the ordinary people who believed the notion that education is the solution. At the same time, corruption continues to enrich those in positions of power. The study concludes that virtual mentoring can modernise the retention and development of teaching talent, as it helps build confidence in mentees and enhances their leadership skills. It asserts that advancements in technology can transform the mentoring landscape by aligning it with demand-driven human resource development, assisting many developing nations with a shortage of science teachers to receive training while employed.

BIBLIOGRAPHY

Ai, Bin, Xueshan Li, and Guofang Li. “When City Meets Rural: Exploring Pre-Service Teachers’ Identity Construction When Teaching in Rural Schools.” *Sage Open* 12, no. 1 (2022): 21582440221079910.

Andersen, T. S., and H. Wellen. “ Being a Mentor in the Digital Era: An Exploratory Study of the Benefits Undergraduate Student Mentors Derive from Providing Virtual Mentoring to Youth.” *Journal of Community Psychology* 51, no. 7 (2023): 2635–51.

Anyanwu, J., and E. C. Abe. “Influence of Mentoring on Teachers’ Instructional Delivery in Secondary Schools in Obio/Akpor Local Government Area.” *International Journal of Education, Learning and Development* 11, no. 3 (2023): 12–24.

Baker-Gardner, R. “ A Proposed Model for the Induction of New Teachers in Jamaican Primary Schools.” *International Journal of Education and Research* 2, no. 12 (2014): 283–96.

Belouahem, Ziyad. “Rote vs Meaningful Learning in EFL Classes: Perspectives and Beliefs.” Guelma-University, 2020. https://dspace.univ-guelma.dz/jspui/bitstream/123456789/10401/1/M821.277.pdf.

Braun, Virginia, and Victoria Clarke. “Using Thematic Analysis in Psychology.” *Qualitative Research in Psychology* 3, no. 2 (2006): 77–101.

Chigora, Farai, Chipo Katsande, Promise Zvavahera, Evelyn Chiyevo Garwe, and Brighton Nyagadza. “Transferability of Governance Ethics in the Fourth Industrial Revolution Teaching and Learning Developments: A Distanced Higher Education Assessment in Zimbabwe amid COVID-19 Pandemic.” In *Responsible Management of Shifts in Work Modes–Values for a Post Pandemic Future, Volume 1*, 179–95. Emerald Publishing Limited, 2022.

Cilliers, Jakkie. *The Future of Africa: Challenges and Opportunities*. Springer Nature, 2021.

Creswell, John W. "Reflections on the MMIRA the Future of Mixed Methods Task Force Report." *Journal of Mixed Methods Research*. Sage Publications Sage CA: Los Angeles, CA, 2016.

Cui, Mingkun. "Rural and Remote Education for Rural Revitalization in China." In *Handbook on Rural and Remote Education*, 251–64. Edward Elgar Publishing, 2025.

Dadvand, Babak, Juliana Ryan, and Steve Murphy. "Context Matters: Rethinking Graduate Teacher Readiness for Hard-to-Staff Schools." *Teachers and Teaching*, 2025, 1–16.

David, C., and C. Kim. " Mentoring Practices in Secondary Schools: Perceptions of Mentors and Preservice Teachers in Mozambique." *Innovation and Education* 5, no. 1 (2023): 54–80.

Downey, Jayne, and Jennifer Luebeck. "Place-Attentive Professional Learning for Rural and Remote Teachers." In *Handbook on Rural and Remote Education*, 80–93. Edward Elgar Publishing, 2025.

Dziwa, Dairai Darlington, and Louise Postma. *Building Creative Capacities through Art Teacher Education in Zimbabwe*. Bulgarian Comparative Education Society , 2020.

Fiannaca, Natalie. " Empowering Educators: Perspectives and Confidence Levels of Teacher Candidates in Digital Media Literacy," 2024.

Fish, Tim, Ondine Bradbury, Richard O'Donovan, Ana Larsen, and Lyn Komarzynski. "'I Do Plan to Do That in the Future, Just Not the near Future': Rural Professional Experience Programs and Pre-Service Teacher Graduate Destination Preferences." *The Australian Educational Researcher* 52, no. 1 (2025): 431–47.

Gapa, Clyde Kudzanai. "Zimbabwe Today Is Not Zimbabwe Tomorrow: Investigating Economic Prospects, Capacities, and Strategic Priorities for Enhancing Global Competitiveness." *Capacities, and Strategic Priorities for Enhancing Global Competitiveness.(September 14, 2024)*, 2024.

Haleem, A., M., Javaid, M. A., Qadri, and R. Suman. " Understanding the Role of Digital Technologies in Education: A Review." *Sustainable Operations and Computers* 3 (2022): 275–85.

Haran, V. V., and A. Jeyaraj. " Organisational E-Mentoring and Learning: An Exploratory Study." *Information Resources Management Journal (IRMJ)* 32, no. 1 (2019): 58–72.

Harris, Marnie, David Rhodes, Christina Gray, and Lynette Vernon. "Beyond the City Limits: Perceptions of Pre-Service Teachers Undertaking Professional Experience in Regional, Rural and Remote Schools: M. Harris et Al."*The Australian Educational Researcher* 52, no.3(2025):2229–53.

Henriques, Susana, Jose Antonio Moreira, Maria de Fatima Goulao, and Daniela Melare Vieira Barros. "Online Training of Trainers from the Open University, Portugal." *EDEN Conference Proceedings* 1 (2015): 798–804.

Iqbal, H. " E-Mentoring: An Effective Platform for Distance Learning."*E-Mentor* 84, no.2(2020):54–61.

Irby, Beverly J, and Elizabeth Pugliese. "Mentoring Takes on Different Forms as We Physically Distance, but Personally Engage." *Mentoring & Tutoring: Partnership in Learning*. Taylor & Francis, 2020.

Ivanytska, Oksana, Olha Bilyakovska, Magdalyna Opachko, Halyna Lotfi Ghahrodi, Nadiya Zayachkivska, And Tetyana Yakymovych. "The Impact Of Mentorship Programs Using Virtual Reality On Student Performance." *Journal of Theoretical and Applied Information Technology* 103, no. 2 (2025).

Kernan, J., J. DeNoon, E. Roberts, and T. Sanford. " Virtual Mentorship of Teacher Leaders: The Ripple Effect." *Journal of Mathematics and Science: Collaborative Explorations* 17, no. 1 (2021): 14.

Lee III, R. R. " Investigating Learning and Development Professional Best Practices for Designing and Implementing Virtual Communities of Practice ." University of Arizona Global Campus, 2024.

Li, Linlin, Chun-Wei Huang, Claire Morgan, Kim Luttgen, Eunice Chow, and Shuangting Yang. "Empowering Rural Students through Computational Thinking and Real-World STEM Applications: Insights from an Innovative High School Curriculum." In *Frontiers in Education*, 9:1452470. Frontiers Media SA, 2025.

Mathai, R., and T. Arumugam. "Preference and Promotion of E-Learning as a Training Medium in the Hospitality Industry, with Special Reference to Four- and Five-Star Hotels in Tamil Nadu, India." *International Journal of Business Administration* 7, no. 3 (2016): 91–100.

Matorevhu, A. " Curriculum Innovation Implementation for Industrialisation: A Case of Education 5.0 Preservice Science and Mathematics Teacher Preparation." *Journal of Research in Instructional* 3, no. 1 (2023): 69–86.

Mendenhall, Mary. "Teachers for Teachers: Advocating for Stronger Programs and Policies for and with Refugee Teachers in Kakuma Refugee Camp, Kenya (Dispatch)." *Studies in Social Justice* 12, no. 2 (2018): 356–63.

Mills, Martin, Lisa van Leent, Terri Bourke, Craig Wood, Simone White, Matthew Readette, and Reece Mills. "Teacher Shortages: A Social Justice Perspective on an Australian Teacher Education Policy." *Teaching Education* 36, no. 1 (2025): 1–17.

Motsamai, M W, and C Alers. "Teachers' Perspectives on the Effects of Free Primary Education Policy of the Kingdom of Eswatini on Education Quality in Public Schools." *African Journal of Public Affairs* 13, no. 1 (2022): 79–96.

Mudungwe, Peter. "Migration Governance in Africa: Challenges and Opportunities." *African Human Mobility Review* 11, no. 1 (2025): 13–40.

Mugizi, Wilson, and Judith Irene Nagasha. "E-Learning." *Conceptualizations of Africa: Perspectives from Sciences and Humanities*, 2025, 143–63.

Mukeredzi, Tabitha Grace, Nonhlanhla Mthiyane, and Carol Bertram. "Becoming Professionally Qualified: The School-Based Mentoring Experiences of Parttime PGCE Students." *South African Journal of Education* 35, no. 2 (2015): 1057.

Mullen, Carol A, and Cindy C Klimaitis. "Defining Mentoring: A Literature Review of Issues, Types, and Applications." *Annals of the New York Academy of Sciences* 1483, no. 1 (2021): 19–35.

Mulyati, Puji, Dewi Apriyani, and Suriswo Suriswo. "Collaborative Strategic Mentoring Model to Improve Digital Learning Literacy Competencies (Google Meet And Canva) among School Principals." *Journal of English Language and Education* 10, no. 1 (2025): 248–56.

Mundia, Catherine Nyawira, and Mike Iravo. "Role of Mentoring Programs on the Employee Performance in Organisations: A Survey of Public Universities in Nyeri County, Kenya." *International Journal of Academic Research in Business and Social Sciences* 4, no. 8 (August 24, 2014). https://doi.org/10.6007/IJARBSS/v4-i8/1110.

Mutiarin, Dyah, Halimah Abdul Manaf, Mohamad Nur Salam Man, Aulia Nur Kasiwi, and Adhianty Nurjanah. "Analysis of E-Mentoring Platform for Future Leaders' Development: A Comprehensive Literature." In *E3S Web of Conferences*, 440:03021. EDP Sciences, 2023.

Muzira, D. R., and B. M. Bondai. " Perception of Educators towards the Adoption of Education 5.0: A Case of a State University in Zimbabwe." *East African Journal of Education and Social Sciences* 1, no. 2 (2020): 43–53.

Naman, Sean M., Jordan S. Rosenfeld, Jason R. Neuswanger, Eva C. Enders, John W. Hayes, Eric O. Goodwin, Ian G. Jowett, and Brett C. Eaton. "Bioenergetic Habitat Suitability Curves for Instream Flow Modelling: Introducing User-friendly Software and Its Potential Applications." *Fisheries* 45, no. 11 (2020): 605–13.

Nyaruwata, Leonorah. "Teacher Development During and Beyond COVID-19: Perspectives from Zimbabwe." *Teacher Education through Flexible Learning in Africa (TETFLE)* 3, no. 1 (2022).

Okeke-Ezenyanwu, J.A., and I.M.V. Enwere. "Mentoring: A New Paradigm for Improving And Sustaining The Teaching And Learning Of Business Education." *Multidisciplinary Journal Of Vocational Education & Research* 5, no. 1 (2023): 1–14.

Okeke, Nonyem Ifediorah, and Choice Chimaa Okaforcha. "Use of Digital Facilities as a Correlate to Effective Inspection of Public Secondary Schools in The Enugu Education Zone, Enugu State, Nigeria." *Unizik Journal of Educational Research, Science and Vocational Studies* 1, no. 1 (2025).

Ombogo, Tandy. "Causes, Effects & Mitigation of Brain Drain in Sub-Saharan Africa: An Annotated Bibliography." *Electronic Journal of Africana Bibliography* 17, no. 2 (2023).

Sarfo, Isaac, Jiajun Qiao, Li Lingyue, Zhu Qiankun, George Darko, Emmanuel Yeboah, Mohamed Abdallah Ahmed Alriah, Desmond Gagakuma, and Dhekra Ben Amara. "Why Is Rural Revitalization Difficult to Achieve? An in-Context Discussion of Conceptual Barriers to China's 2018–2022 Strategic Plan." *Environment, Development and Sustainability*, 2024, 1–36.

Slattery, Martin. *Education Strategy in a Changing Society: Personalised, Smarter, Lifelong Learning in the 21st Century*. Routledge, 2024.

Talbert, Patricia Y., George Perry, Luisel Ricks-Santi, Lourdes E. Soto de Laurido, Magda Shaheen, Todd Seto, Deepak Kumar, Alexander Quarshie, Maya Thakar, and Doris M. Rubio. "Challenges

and Strategies of Successful Mentoring: The Perspective of LEADS Scholars and Mentors from Minority Serving Institutions." *International Journal of Environmental Research and Public Health* 18, no. 11 (2021): 6155.

Tariq, Muhammad Usman. "Innovative Mentoring Programs: Strategies for Success in Post-COVID-19 Education." In *Mentoring Students and Instructors for Retention and Success*, 123–58. IGI Global Scientific Publishing, 2025.

Teixeira, P. R. D. S. M., A. C. V. de Almeida, L. C. Mourão, G. S. de Oliveira, A. C. C. Machado, and F. B. Penna. " A Preceptoria e o Ensino Do Autocuidado Do Diabético: Das Dificuldades Aos Caminhos Possíveis Preceptorship and the Teaching of Diabetic Self-Care: From Difficulties to Possible Paths." *Saúde Em Redes* 7, no. 3 (2021): 41–54.

Teng, Changhong, and Xuanwei Ma. "Is In-Person Mentoring Still a Must? Exploring Online Mentoring in Graduate Education through Descriptive and Variance Analysis." *Innovations in Education and Teaching International*, 2025, 1–16.

Thompson, Erika L, Toufeeq Ahmed Syed, Zainab Latif, Katie Stinson, Damaris Javier, Gabrielle Saleh, and Jamboor K. Vishwanatha. "Examining Educational and Career Transition Points among a Diverse,Virtual Mentoring Network."*Journal for STEM Education Research* 8, no.1(2025):113–28.

Tisdell, Elizabeth J, Sharan B Merriam, and Heather L Stuckey-Peyrot. *Qualitative Research: A Guide to Design and Implementation*. John Wiley & Sons, 2025.

Topcu, Asiye Pınar Köksal. "Design, Implementation, and Evaluation of Remote Mentoring Practices for Technology Integration in Higher Education." *Kastamonu Education Journal* 33, no. 2 (2025): 286–303.

Toreid, Hilde Elisabeth, Berit Harriet Mosseng Sjølie, Sverre Andreassen Bjørbæk, and Marcel Köhler. "Digital Peer Mentoring in Higher Education: Results from a Qualitative Study Involving Digital Part-Time Nursing Students." *Heliyon* 11, no. 4 (2025).

Vidal, Shira, and Miriam Kuckuck. "Pre-Service Teacher Action Competence in Education for Sustainable Development: A Scoping Review." *Sustainability* 17, no. 9 (2025): 3856.

ABOUT AUTHOR

Dr. Rosemary Madzore is a Postdoctoral Fellow in the Department of Educational Foundations at the University of South Africa (UNISA). With over ten years of experience in higher education in Zimbabwe, she specializes in teacher education, mentorship, and educational leadership. Her research focuses on virtual mentoring in low-resource settings, aiming to leverage technology for teacher development and promote inclusive scholarship. Dr. Madzore also investigates Indigenous Knowledge Systems, emphasizing the integration of local perspectives into education. Passionate about enhancing leadership capacity, she draws on Ubuntu philosophy to foster transformative mentorship and support the decolonization of education. As an experienced educator and researcher, she promotes postgraduate research capacity-building and collaborates to advance contextually relevant scholarship across Africa.