

Review of: "Digital Literacy Skills of Teachers: A Study on ICT Use and Purposes"

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Potential competing interests: No potential competing interests to declare.

The paper delves into various critical themes, including the digital divide, pedagogical approaches, digital education and policy frameworks, and teacher readiness. It provides a thorough analysis of each theme, offering a comprehensive understanding of the factors influencing the effective integration of digital tools in teaching. It supports its arguments and claims with relevant citations from previous studies, reports, and scholarly articles. This strengthens the credibility of the information presented and allows readers to explore the cited sources for further reading.

While the review presents a wealth of information, it could benefit from more synthesis and analysis of the existing literature. The author could provide a critical evaluation of the findings, identify common trends or gaps in the research, and offer their own insights and recommendations. This would add depth and originality to the literature review. The literature review predominantly relies on references from before the knowledge cutoff date of September 2021. To ensure the review is up-to-date, it would be beneficial to include more recent references that reflect the latest developments in the field of digital education and the integration of digital tools in teaching.

In addition, the review examines the various policy frameworks implemented in Zambia, demonstrating a thorough understanding of the government's efforts to promote digital education and skills development. It highlights the specific policies and strategies that have been implemented and their objectives, such as increasing broadband connectivity and integrating digital technologies in education and training. While the literature review mentions the Networked Readiness Index (NRI) and the International Telecommunication Union (ITU) as sources of information, it would benefit from citing specific data and evidence to support the claims made. Providing statistics or research findings related to the digital skills gap, ICT integration in education, and inequalities in Zambia would strengthen the arguments presented.

The literature review briefly mentions challenges related to teaching digital competencies in Zambia, such as low ICT integration, inequalities, and limited government funding. However, it could provide a deeper analysis and exploration of these challenges. This could involve examining the root causes, discussing the implications for education and skills development, and suggesting potential strategies for addressing these challenges.

The literature review acknowledges that Zambia shares similar challenges with other African countries and regions. However, it does not provide a comparative analysis with other regions, such as North America, the European Union, or the Nordic Region, as it does in other sections of the review. Including a comparative perspective would offer valuable insights into how Zambia's efforts and challenges compare to those in other parts of the world and provide a broader

context for understanding the country's digital education landscape.

Methodology:

The methodology chosen, which involved using a paper-based questionnaire, is aligned with the research objective of assessing the digital competencies of teachers in secondary schools in Lusaka, Zambia. The questionnaire design covers relevant aspects, such as teachers' sociodemographic characteristics, ICT use and purpose, knowledge of digital literacy skills, and difficulties in teaching digital competencies. This approach allows for a comprehensive assessment of the target population.

The study population includes teachers from both government and private schools, providing a more comprehensive representation of the secondary school teacher population in Lusaka. Additionally, the use of simple random sampling ensures that all teachers have an equal opportunity to be included in the study, enhancing the generalizability of the findings.

The use of the latest version of SPSS for data analysis is a strength of the methodology. The researchers utilized descriptive statistics, such as simple frequency, percentage, mean, and standard deviation, which are appropriate for summarizing and presenting the data collected through the questionnaire.

However, the methodology does not provide a clear justification for the selection of the sample size of 281 teachers from 20 schools. Including a brief explanation of the rationale behind this sample size, such as power calculations or practical considerations, would enhance the transparency and credibility of the research.

The methodology does not discuss the steps taken to ensure the reliability and validity of the questionnaire used. Including information on the questionnaire's piloting, pre-testing, or any measures taken to establish its reliability and validity would strengthen the methodology.

The methodology briefly mentions the use of printed structured questionnaires for data collection, but it does not provide details about the data collection process itself. Information about how the questionnaires were distributed, the timeframe for data collection, and any steps taken to ensure data quality (e.g., training of data collectors or data cleaning procedures) would add clarity to the methodology.

Discussion and Conclusion:

Strengths:

Comprehensive analysis: The discussion section provides a thorough analysis of the research findings in the context of various factors, such as the digital divide, pedagogical approaches, digital education and policy frameworks, and teacher readiness. This comprehensive analysis helps to situate the findings within a broader context and facilitates a deeper understanding of the implications.

Comparative analysis: The discussion compares the findings with other regions, such as Sub-Saharan Africa, North America, the European Union, and the Asia-Pacific regions. This comparative analysis adds value to the study by

highlighting similarities and differences in the challenges faced by teachers across different contexts. It provides a broader perspective and enhances the relevance and applicability of the findings.

Policy and practical implications: The conclusion section succinctly summarizes the main implications of the research findings. It emphasizes the need for comprehensive policies, infrastructure development, and teacher professional development programs to address the challenges identified, such as the digital divide, curriculum alignment, teacher preparedness, and cost-effectiveness of technology adoption. These implications provide valuable insights for policymakers, educators, and other stakeholders involved in improving digital competencies in Zambia's secondary schools.

Areas for improvement:

In-depth discussion of findings: While the discussion section covers a range of topics and makes comparisons with other regions, it could benefit from a more detailed analysis and interpretation of the specific findings from the study. Providing more insights and discussing the implications of each finding in relation to the research objective would enhance the depth of the discussion.

Integration of theoretical frameworks: The discussion and conclusion would be strengthened by integrating relevant theoretical frameworks or models that could help explain the challenges faced by teachers in teaching digital competencies. The inclusion of theoretical perspectives would provide a stronger theoretical foundation for the study and deepen the understanding of the issues at hand.

Recommendations for future research: The conclusion section could include suggestions for future research directions. Identifying areas that require further investigation or exploring potential solutions to the challenges identified would add value and guide future studies in this field.