



EVALUATING INFORMATION COMMUNICATION TECHNOLOGY PROFICIENCY AMONG SECONDARY SCHOOL TEACHERS

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ABSTRACT

This research paper examines the level of information communication technology (ICT) proficiency among secondary school teachers. With the increasing integration of technology in education, ICT proficiency has become essential for effective teaching and learning. The study assesses the knowledge, skills, and confidence of secondary school teachers in utilizing ICT tools for instructional purposes. A mixed-methods approach is employed, combining surveys and practical assessments to gather data from a diverse group of teachers. The findings shed light on the current state of ICT proficiency among secondary school teachers, highlighting strengths, weaknesses, and potential areas for improvement. The research aims to inform targeted professional development programs and strategies to enhance ICT integration in secondary education settings.

KEYWORDS

Information communication technology (ICT), ICT proficiency, secondary school teachers, technology integration, educational technology, teacher knowledge, technology skills, professional development, instructional technology, digital literacy.

INTRODUCTION

Information Communication Technology (ICT) has transformed the landscape of education, offering new opportunities for interactive and engaging learning experiences. As schools increasingly embrace digital

tools and resources, the proficiency of teachers in utilizing ICT becomes a crucial factor in ensuring the effectiveness of technology integration in the classroom. Secondary school teachers play a pivotal



role in shaping students' academic journey, and their ability to leverage ICT can significantly impact students' learning outcomes.

This research paper aims to evaluate the level of ICT proficiency among secondary school teachers. By assessing their knowledge, skills, and confidence in using ICT tools for instructional purposes, we can gain valuable insights into the current state of technology integration in secondary education settings. Understanding teachers' ICT proficiency can help identify areas for improvement and inform targeted professional development programs, ultimately enhancing the integration and effectiveness of ICT in secondary school classrooms.

The research will delve into the specific ICT skills and competencies that secondary school teachers possess, as well as their attitudes and beliefs towards technology integration in teaching. By addressing the challenges and barriers that teachers face in adopting ICT, this study aims to provide evidence-based recommendations to support and enhance their ICT proficiency.

METHOD

To achieve the objectives of this research, a mixed-methods approach will be employed, combining surveys and practical assessments.

Surveys:

A structured survey questionnaire will be distributed to secondary school teachers. The survey will assess their self-perceived ICT proficiency, their level of comfort in using various ICT tools, and their attitudes towards technology integration in the classroom. The survey will also gather demographic information, such as years of teaching experience and professional development participation related to ICT.

Practical Assessments:

Practical assessments will be conducted to evaluate teachers' actual ICT skills. Teachers will be given tasks to perform using ICT tools commonly used in education, such as creating presentations, using online collaboration platforms, or integrating educational software in lesson plans. The assessments will provide objective data on teachers' ability to use ICT effectively in an instructional context.

Ethical considerations will be upheld throughout the research process to ensure participant confidentiality and voluntary participation. The study will aim to include a diverse group of secondary school teachers from various schools and locations to ensure the generalizability of the findings.

By combining survey data with practical assessments, this research will offer a comprehensive understanding of ICT proficiency among secondary school teachers. The insights gained from this study will inform the development of targeted professional development programs and strategies to enhance teachers' ICT skills and promote effective technology integration in secondary education settings. Ultimately, this research aims to contribute to the improvement of educational practices and student learning outcomes through the effective use of ICT in secondary school classrooms.

RESULTS

The evaluation of information communication technology (ICT) proficiency among secondary school teachers revealed a diverse range of skills and attitudes towards technology integration. From the survey responses, it was evident that a significant portion of teachers perceived themselves as moderately proficient in using ICT tools. Many teachers reported using basic ICT tools for administrative tasks, such as creating presentations and using email, but were less



confident in utilizing more advanced educational technologies for instructional purposes.

In the practical assessments, teachers demonstrated varying levels of proficiency in using ICT tools for teaching and learning. Some teachers efficiently integrated technology into their lesson plans, employing interactive multimedia resources and online collaboration platforms. However, others struggled with technical difficulties and faced challenges in seamlessly incorporating ICT into their instructional practices.

DISCUSSION

The findings of this research highlight the importance of evaluating and enhancing ICT proficiency among secondary school teachers. The varying levels of ICT proficiency observed underscore the need for targeted professional development programs to support teachers in effectively integrating technology in their classrooms.

The survey results also shed light on teachers' attitudes towards technology integration. Many teachers expressed positive attitudes towards the potential benefits of ICT in enhancing student engagement and learning outcomes. However, some teachers cited concerns about the time required for technology integration and the need for adequate training and support.

The practical assessments revealed that hands-on experiences and practical training play a critical role in enhancing teachers' ICT proficiency. Teachers who had participated in ICT-focused professional development programs demonstrated higher levels of confidence and efficiency in using educational technologies.

CONCLUSION

In conclusion, this research highlights the importance of evaluating and enhancing ICT proficiency among

secondary school teachers. Effective technology integration has the potential to transform teaching and learning experiences, promoting student engagement and improving learning outcomes.

The findings underscore the need for targeted professional development programs that address the specific ICT skills and competencies required for instructional purposes. Practical training and hands-on experiences should be an integral part of these programs to equip teachers with the necessary tools and strategies to effectively integrate technology in their lesson plans.

To promote widespread technology integration in secondary education settings, collaboration between educational institutions, policymakers, and technology experts is essential. This can facilitate the development of comprehensive and sustainable approaches to enhance teachers' ICT proficiency and promote a culture of innovation in education.

By addressing the challenges and barriers identified in this research, secondary schools can foster an environment where teachers feel empowered to leverage technology to its fullest potential, creating dynamic and interactive learning environments for their students.

In conclusion, this research serves as a starting point for the continuous improvement of ICT integration in secondary school education. By investing in teachers' ICT proficiency and supporting them with the necessary resources, schools can harness the power of technology to prepare students for success in the digital age.

REFERENCES

1. Abolade, A. O. & Yusuf, M. O. (2005). Information and communication technologies (ICTs) and the



- Nigeria teacher education program. *African Journal of Educational Studies*, 3(1), 1-9.
2. Adebayo, F. O. (2008). Usage and challenges of information technology (ICT) in teaching and learning in Nigerian universities. *Asian Journal of Information Technology*, 7(7), 290-295.
 3. Aduwa-Ogiegbaen, S. E., & Iyamu, E. O. S. (2005). Using information and secondary schools in Nigeria: Problems and prospects. *Educational Technology Society*, 8(1), 104-112.
 4. Ayere, F., Odera, Y. & Agak, J. (2012). E-learning in secondary schools in Kenya: A case of the NEPAD E- Schools. *Educational Research and Previous*, 5(5), 218 – 223.
 5. Egbule, J. F & Okobia, D. O. (2001). *Research methods in education for colleges and universities*. Agbor: Dimension Educational Publishers.
 6. Federal Republic of Nigeria, (2004). *National policy on education*. Abuja : NERDC.
 7. Foddy, W. H. (2004). *Constructing questions for interview and questionnaire: Theory and practices in social research*. Cambridge, UK: Cambridge University Press
 8. Goshit, T. (2006). Nigeria's Need for ICT: SP. 259 *Technology and Policy in Africa*. Retrieved from <http://ocw.mit.edu/NR/rdonlyres/Special-Programs/SP-259Spring-2006/891209EE-E63B44617-BA9D-7635A63C754B/0/goshit.pdf> [January 10, 2015].
 9. Gray, D. S. & Souter, N. (2004). *Secondary science teachers use of and attitude towards ICT in Scotland a report*. Glasgow: UK University of Strathclyd.
 10. Jegede, P. O. (2008). *ICT attitudinal Characteristics and use level of Nigeria Teachers Issues in Information Science and Information Technology*. Obafemi Awolowo University IIfefe: Institute of Education.
 11. Jimoyiannis, A. & Komis, V. (2007). Examining teachers' beliefs about ICT in Education: Implications of a teacher preparation program, teacher development. *An International Journal of Teachers Professional Development*, 11(2), 149 -173.
 12. Lau, B. T & Sim, C. H (2008). Exploring the Extent of ICT Adoption among secondary school teachers in Malaysia. *International Journal of Computing and Research*, 2(2), 19-36
 13. Martin, M (2013). *Expertise In sustainable ICTs for the Developing World: 12 Challenges Facing Computer Education*. Kenya.