INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES

Vol 14, Issue 8, (2024) E-ISSN: 2222-6990

Advantages of using Technology in Classroom Assessment to Improve Teaching Professionalism and Challenges among Tamil National Type School Teachers (SJKT)

Priya Murugan, Hazrati Husnin

Faculty of Education, Universiti Kebangsaan Malaysia (UKM), Bangi, Malaysia

Corresponding Author's Email: P119656@siswa.ukm.edu.my

To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v14-i8/22521 DOI:10.6007/IJARBSS/v14-i8/22521

Published Date: 16 August 2024

Abstract

This study aims to examine the advantages of using technology in classroom assessment to enhance the professionalism of teaching and its challenges among teachers in Tamil National Type Schools (SJKT). The rapid evolution of teaching and technology indicates that the use of integrated ICT teaching materials in the teaching and learning process is gaining consideration. The presence of technological diversity has the potential to have a positive impact on the education system. This study was conducted in the Hulu Perak, Kuala Kangsar, and Batang Padang districts involving a total of 130 SJKT teachers. The method used for data collection was through a questionnaire via Google Form. Data analysis using SPSS indicates that the use of technology brings benefits in terms of enhancing teaching professionalism. The findings of this study provide an in-depth insight into the importance of technological knowledge in education, especially in the context of teaching and learning. Despite facing challenges, mastering technology remains an important aspect of enhancing teacher professionalism. Therefore, educators need to be provided with adequate exposure and training to address technological challenges while harnessing its potential in teaching.

Keywords*:* Knowledge of Technology, Advantage of Technology, Classroom Assessment, Teaching Professionalism

Introduction

Malaysia's education system has undergone a complete and methodical change to prepare its society to progress and compete internationally. Malaysia and various countries around the world are moving towards 21st-century information and communication technology (ICT)-based education. The rapid evolution of teaching and technology shows that the use of ICT-integrated teaching materials in the teaching and learning process is beginning to gain consideration. The existence of technological diversity has the potential to impact positive changes in the education system. The change has also changed the role of the teacher, who

is the main implementer in this field, to keep up with the times and new learning methods of the 21st century. In order to achieve the latest level of learning today, teachers must have a high level of competence with solid knowledge, solid pedagogy, and high technological knowledge to take over conventional teaching methods that are less relevant today. (Norasiah, Jamilah, and Rosnah, 2012).

The process of creating innovative skills and human capital can support the social, cultural and economic growth of a country. Therefore, education has the power to influence the future of human beings and their own personal development. (Wahab, Mohamed, Hassan & Haron 2013). The achievement of a country depends heavily on the knowledge, skills and competence of its people. As a result, it is no wonder that countries with a higher level of education are more likely to enjoy greater economic prosperity. Establishing the Malaysia Education Development Plan 2013 - 2025 establishes that for achieving good economic growth and development in Malaysia, education plays a crucial role. (Pendidikan, KPM-2015).

In order to enhance the professionalism of teachers, the Government of Malaysia has spent thousands of ringgit to provide and supply technology infrastructure and equipment (desktops, computers, laptops, LCD projectors, printers and CD course software) to all schools in Malaysia for teaching and learning. process. The Keguruan Professionalism Development Training is also provided to train teachers using the technology and hardware as well as the software that has been supplied.

The government-wide initiative aimed at increasing the professionalism of teachers is information technology for teachers. However, this responsibility should not be left entirely to the government to a high level of professionalism. As a qualified professional educator, once a teacher explores the field, he must continue to grow and see this as the beginning of a new challenge in their professional life. Change comes in various forms for teachers. The ability to develop personally and professionalism of determination are prerequisites for the success and sustainability of the teacher's career.

Literature Review

The use of Technology among Teachers at National Type School

In this era of globalization, KPM has improved the quality of education to ensure equal academic achievement in cities and outdoors. Nevertheless, out-of-city education is still lagging behind due to lack of facilities, considerable education gaps in the community, low academic achievement, lack of teaching material, and lack of technological facilities. (Raman, Othman, & Affandi, 2019). According to Belalang and Abd Rahman (2016) the knowledge and skills needed to understand technologies including hardware, software, local area networking systems, the Internet, and other technology and communication components. The efficiency and effectiveness of learning results can be enhanced by incorporating technology into the teaching and learning process. (Nasir, Surat, Maat, Abd Karim, & Daud, 2018a; Sufian, Nordin, Tauji, & Nasir, 2020). According to Silin and Kwok (2017), the effective use of technology in teaching and learning can influence students and teachers to implement technology in offshore school learning. Teachers can make preliminary preparations before lessons by finding suitable teaching materials, as well as interesting teaching methods, to ensure that teaching can be delivered effectively. They can also transform the learning process through

the use of tools like PowerPoint and other interactive visual aids. The use of technology is essential for teachers to share knowledge and advance in education (Khan, 2017).
Technology is recognized as part of a tool in society and technology in education is the basis for the country to enhance the academic interest of students in K-12 schools. Vesudevan (2021).
The needs of the current education system have been significantly affected by technological developments and their applications in teaching and learning. The information-based approach to delivering information to students gradually has been replaced by traditional methods. In response to the appeal, the Malaysian Ministry of Education has drafted the Malaysia Education Development Plan 2013-2025, aimed at promoting the use of technology among teachers in their teaching practice. (Ambikapathy, 2020).
However, after the Malaysia Education Development Plan 2013-2025 was introduced, there are still some researchers reporting the problem of the minimum use of technology applications among teachers in classrooms to guide students. For example, Gil-Flores et al. (2017) and Istifci (2019) have that the level of use of technology among language teachers for teaching and learning is less satisfactory even though they are equipped with laptops by KPM. At the same time, Drossel and Eickelmann (2017) and Comi et al. (2017) found that the attitude of school teachers to the use of computer technology only performs side activities such as keeping school management records and grades while most teachers do not use technology to reach their full potential. Based on the above issues, this study aims to find out how the use of technology increases the professionalism of primary school teachers.

Teacher's Professionalism

Naturally, the school teacher is responsible for teaching specific subjects to students in the school and for providing teaching and learning in accordance with the school's established curriculum. They need to be skilled in teaching and learning according to the 21st century in order to the objectives of the KPM. The duty of teachers is more challenging in schools nowadays because the teacher's duty is not only to be a teacher or disseminate knowledge to students but they are also burdened with other tasks such as; facilitator, motivator, academic planner, curriculum advisor, club or association head, Uniform Unit Advisor, sports coach and much more. In addition, Wong et al., (2018) stated that today's educational challenges, suggest teachers to use technology extensively in the teaching process. This statement was confirmed by Wei et al. (2016) in which the acceptance of teachers towards technology depends heavily on the attitude of the teacher. Referring to the above issues, it is important for us to know whether the use of technology can enhance professionalism.
It is undeniable that the implementation of technology in schools has transformed the teaching process from conventional teaching methods to computer learning methods. Raman and Shariff (2018) argue that developing nations need more teachers with expertise in information and communication technology. Thus, Raman and Shariff (2018) recommend that it is important to give birth to teachers who are qualified and capable of handling computers and at the same time will make full use of the technological facilities available in schools for efficient teaching and learning. At the same time, the Halili and Suguneswary (2016) findings show that teachers serving at the Tamil Cluster School in Pahang do not have a negative attitude towards the use of facilities such as audiovisual material and only a handful of teachers are trained in the integration of technology in the teaching and learning process and the rest stated that their ability to use technology in instruction and learning

depends on their leisure time, i.e. after the end of the cocurriculum activities and also depend on the speed of the internet. Thus, this survey aims to determine whether there is a correlation between the teacher's attitude to the use of technology in the classroom and the increased professionalism of the teacher.

Challenges

Nachiappan et al. (2017) found that school teachers are usually burdened with a lot of school tasks and this scenario may reduce their focus on the main tasks. This statement was supported by Johari et al. (2018) who argued that apart from the academic field, teachers also had to bear other duties, whether academic or non-academic, such as serving as chairmen of committees in different tasks at the school. This problem directly reduces the time that primary school teachers use technology to handle the teaching process. At the same time, Halili and Suguneswary (2016) also stated that the use of computer-based teaching equipment for teaching Tamil subjects is an up-to-date trend that is no longer alien to Tamil language teachers.

Past Related Studies

Tittle	Authors	Year	Knowledge of Technology	Use of Techonoly in assesment	Teaching Profesionalism	Challenges in Technology	Data Analysis	Country
Shaping the future learning environment, pedagogical and technological perspectives	Simon K.S. Cheung, Lam For Kwok, Kongkiti Phusavat. Harrison Yang	2021	/	/		/	Quantitative	China
Technology acceptance of four digital learning technologies (classroom response system, classroom chat, e-lectures, and mobile virtual reality) after three months' usage	David A. Sprenger Adrian Schwaninger	2021	/			/	Quantitative	Switzerland
Towards teaching-sensitive technology: a hermeneutic	Maria Hvid Stenalt Helle Mathiasen	2024	/	/		/	Qualitative	Denmark

analysis of higher education teaching								
Using technology to facilitate effective assessment for learning and feedback in higher education	Susan J. Deeley	2022	/	/	/	/	Quantitative	United Kingdom
Teachers' Perceptions: barriers and supports to using technology in the classroom	Eileen Wood Julie Mueller Teena Willoughby Jacqueline Specht Ted Deyoung	2007	/	/	/	/	Quantitative	Canada

Accountability, level of expertise, and responsibility are all characteristics of professionalism (Parr, 2004). According to Robiah (2002), professionalism in education is associated with high standards of performance, morality, and ethics. Professional work practices include behaviour that demonstrates commitment and compliance with ethical standards, reflection on one's pedagogical responsibilities, and a constant desire to learn new things. These issues also include participation in educational renewal or modification, teacher recognition, certification, and professional leadership, such as setting rules or standards for those seeking employment in the college profession. Professional teacher learning has been the subject of many studies (O'Brien, 2016). The purpose and mission statements of the school may be more common to most teachers and display more of their guiding ideas (O'Sullivan & West-Burnham, 2011).

conclusion

To conclude, this study was conducted to obtain information regarding the level of technology usage in classroom assessment and the challenges faced by teachers in integrating technology in classroom assessment among teachers. The study employed a survey method with a questionnaire technique as the data collection tool. The instrument consisted of five parts, namely respondent demographics, technology knowledge, technology usage level, enhancement of teaching professionalism, and challenges in technology usage. The total respondents in this study were 105 teachers from Tamil National Type Schools (SJKT). The data obtained through the questionnaire were analyzed using Statistical Package for Social Science (IBM SPSS 21.0) software. The analysis method used in this study was descriptive analysis to examine mean, standard deviation, frequency, and percentage values. Meanwhile, the inferential statistics used in this study was the Pearson Correlation Test to test hypotheses regarding the variables studied in this research. Based on the conducted study, the use of technology helps teachers to enhance their teaching professionalism by

assisting them in carrying out their essential tasks perfectly and in accordance with the changes in 21st-century education. The use of the internet helps teachers to equip themselves with the knowledge and skills required to become agents of change in society. Furthermore, the challenges faced by teachers in integrating technology into professional development programs for enhancing professionalism are also addressed, and various initiatives have been taken by the Ministry of Education (KPM), State Education Department (JPN), District Education Office (PPD), schools, and also the surrounding community through contributions, upgrading of internet access, and implementation of ICT courses for educators.

References

Ambikapathy A., Halili S. H., and Ramasamy, M. D. (2020). Kemahiran TMK dalam kalangan guru-guru bahasa Tamil sekolah menengah [ICT skills among secondary school Tamil language teachers]. Muallim Journal of Social Sciences and Humanities, 4(3): 99-114. https://doi.org/10.33306/mjssh/85

Dawi, A. H. (2009). Sekolah dan masyarakat. Tanjong Malim: Quantum Books.
Bahagian Pendidikan Guru (BPG). (2009). Standard Guru Malaysia. Putrajaya : Kementerian Pelajaran Malaysia.

Creswell, J. W. (2014). Educational research*: Planning, conducting, and evaluating quantitative and qualitative research (4th ed.).* Boston, MA: Pearson.

Comi S. L., Argentin G., Gui, M., Origo F., and Pagani, L. (2017). Is it the way they use it? Teachers, ICT and student achievement. Economics of Education Review, 56: 24-39. https://doi.org/10.1016/j.econedurev.2016.11.007

Dalli, C., & Urban, M. (2013). Introduction In C. Dalli & M. Urban (Eds.), Professionalism in Early Childhood education and care: International Perspectives (pp. 1-4). London UK: Taylor & Francis.

Davis, F. D. *"Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology*," MIS Quarterly (13:3), 1989, pp. 319-339

David. R. (1997). A Contextualising, Socio-Technical Definition of Technology: Learning from Ancient Greece and Foucault. Dicapai pada November 25, 2022 daripada https://www.tandfonline.com/doi/abs/10.1080/08109029708632084#.UrECDRy%20QbXg

Drossel K. and Eickelmann B. (2017). Teachers' participation in professional development concerning the implementation of new technologies in class: A latent class analysis of teachers and the relationship with the use of computers, ICT self- efficacy and emphasis on teaching ICT skills. Large-Scale Assessments in Education, 5(1): 1-13. https://doi.org/10.1186/s40536-017-0053-7

Evans, L. (2008). Professionals, professionality and the development of education professionals. British Journal of Educational Studies, 56(1), 20-38

Gil-Flores J., Rodríguez-Santero J., and Torres-Gordillo J. J. (2017). Factors that explain the use of ICT in secondary-education classrooms: The role of teacher characteristics and school infrastructure. Computers in Human Behavior, 68: 441-449. https://doi.org/10.1016/j.chb.2016.11.057

Halili S. H. and Suguneswary R. (2016). Teachers' acceptance on using information communication and technology (ICT) in teaching Tamil language. The Online Journal of New Horizons in Education, 6(2): 101-111.

Istifci I. (2019). A comparative study on language teachers' perceptions of ICT self-efficacy. In: Ørngreen R, Meyer B, and Buhl M (Eds.), The ECEL 2019 18th European Conference

on e- Learning: 231-238. Academic Conferences and Publishing International Limited, Oxfordshire, UK.

Johari J., Yean, T. F., and Tjik, Z. Z. (2018). Autonomy, workload, work-life balance and job performance among teachers. International Journal of Educational Management, 32(1): 107-120. https://doi.org/10.1108/IJEM-10-2016-0226

Khan, A. (2017). Blog-based professional development of English teachers in Mumbai: The potential of innovative practice under scrutiny. *Australasian Journal of Educational Technology, 33*(34), 88-106.

Nachiappan, S., Osman, Z., Hassan, N. M., Jamil, N., Hussien, H., Othman, M., and Suffian, S. (2017). The implications of using teaching aids in the teaching of the science and technology component in Malaysian preschools. International Journal of Academic Research in Business and Social Sciences, 7(11): 2222-6990. https://doi.org/10.6007/IJARBSS/v7-i11/3485

Nasir, M. K. M., Surat, S., Maat, S. M., Abd Karim, A., & Daud, M. Y. (2018a). Confirmatory factor analysis on the sub-construct of teaching presence's in the community of inquiry. *Creative Education, 9*(14), 2245-2253.

Nasir., M. K. N., Mansor, A. Z., & Rahman, M. J. A. (2018b). Measuring Malaysian online university student social presence in online course offered. *Journal of Advanced Research in Dynamical and Control Systems, 10*(12), 1442 – 1446.

Raman, K., Othman, N., & Affandi, H. M. (2019). Information communication and technology (ICT) usage gaps between urban and rural schools. *Malaysian Journal of Education, 44*(1SI), 109-119.

Sufian, S. A., Nordin, N. A., Tauji, S. S. N., & Nasir, M. K. M. (2020). The impact of covid-19 on the Malaysian education system. *International Journal of Academic Research in Progressive Education & Development, 9*(2), 764-774.

Wong C. Y., Ibrahim R., Hamid T. A., and Mansor E. I. (2018). Mismatch between older adults' expectation and smartphone user interface. Malaysian Journal of Computing, 3(2): 138-153. https://doi.org/10.24191/mjoc.v3i2.4889