

Technological Knowledge and Self-Efficacy of Primary School Arabic Teachers in Teaching and Learning at Home (PdPr)

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Abstract

The primary alternative during the COVID-19 pandemic phase is online teaching and learning (PdPr). Due to this surprise, Arabic teachers now need to be proficient in technology and have high levels of self-efficacy to manage PdPr. The objective of this study is to determine the level of technological knowledge among Arabic language teachers in primary schools with reference to PdPr implementation. This study used a quantitative approach with a cross-sectional survey design. The complete study sample was determined using stratified random sampling. Out of 152 teachers who work in schools in the northern region of the state of Johor, 111 Arabic teachers made up the sample. This survey research used a survey as a research instrument and has been distributed through Google Form. The mean value, standard deviation, and Pearson's correlation test data were analysed using descriptive and inferential analysis. Analysis of the study findings shows that the level of technology knowledge of Arabic language teachers towards PdPr is at a moderate level (mean = 3.62, sd = 0.48). The self-efficacy of teachers implementing PdPr is also at a high level (mean = 3.90, sd = 0.156). While the relationship between the two variables shows that there is a significant relationship ($r = 0.33$, $p < 0.05$), Thus, in line with the education needs of the 21st century (PAK21), technological knowledge in the application of PdPr can have an impact on the self-efficacy of Arabic teachers.

Keywords: Technological Knowledge, Self-efficacy, Arabic Teacher, Primary School, Teaching and Learning at Home (PdPr).

Introduction

The COVID-19 pandemic's spread caused changes in the country's educational system from a teaching perspective, which produced a new standard for education. Despite not being able to attend school, the face-to-face teaching and facilitation process (PdPc) has been replaced by online teaching and learning (Tesar, 2020). Through an official declaration made by the

Minister of Education (KPM, 2020), the KPM also started action to close all schools and implement online teaching and learning at home (PdPr).

Arabic teachers are not excluded from using information and communication technology in the classroom, according to the suggestions in the Malaysian Education Development Plan (PPPM) 2013–2025 released by the Ministry of Education. Studies by Mukhtar (2017) and Rosni et al. (2016) revealed that the standard method is still used for the majority of Arabic PdPr in schools. According to Muhammad's 2017 study, Arabic teachers who work in primary schools have a level of technology proficiency equivalent to learning the fundamentals. This condition results in Malay students decreasing interest in and enthusiasm for Arabic, which they view as a challenging topic (Najiba et al., 2014; Nurhalimah, 2016). As a result, teachers must incorporate engaging learning techniques including independence and active learning using electronic resources (Zaid et al., 2016).

Additionally, teacher self-efficacy in the context of PdPr refers to a teacher's assessment of both his capacity to accept responsibility as a teacher and his capacity to successfully complete all responsibilities. By varying their lesson plans and learning activities, effective teachers devote more time to their classroom duties (Tscannen-Moran, 1998). Teacher self-efficacy is one of the most explored and researched dimensions in the field of teacher education (Ma et al., 2021; Horvitz et al., 2015; Poulou et al., 2019). It is described as a subjective measure of a teacher's ability to accomplish tasks related to the teaching profession (Ma et al., 2021; Corry & Stella, 2018). Bandura (1977) proposed the concept of self-efficacy as a theoretical framework to explain and predict the results that people expect. Albert Bandura's social cognitive theory is based on the idea of self-efficacy. Bandura's psychological studies have demonstrated that variations in self-efficacy can be identified through efficacy expectations, while the latter is a factor that affects outcomes (Corry & Stella, 2018).

Literature Research

Teaching and Learning at Home (PdPr)

Online learning can be categorised into three categories, according to Perveen (2016): synchronous, asynchronous, and hybrid. According to Salmoon (2014), synchronous learning offers a process for collaborative interaction. It must be accomplished by integrating digital activities, question-and-answer sessions, and the simultaneous use of electronics by professors and students in various locations. According to Yamagata (2014), an application's features including a camera, lesson recording, the display of graphic materials, the ability to share audio and video, and a discussion area assist boost student motivation to continue with this learning.

The Learning Management System (LMS), Course Management System (CMS), and Virtual Learning Environment (VLE) networks enable asynchronous online learning to take place anywhere, and this method gives students access to reading materials in the form of audio lectures, videos, handouts, and PowerPoint presentations. An LMS is a system that facilitates learning and a collection of tools that house the content of learning materials, according to Watson et al. Teachers and students can communicate as if they were in the classroom and have access to a variety of resources through the LMS.

The Google Classroom (GC) platform is used to deploy VLE in many schools, in keeping with the demands of 21st-century education. Awang et al (2020) claim that GC is currently expanding quickly as a tool, platform, and medium in the learning process at the international and national levels that can be effectively fully integrated at all stages of education. It

incorporates Google-owned programmes like *Gmail*, *Google Drive*, *Google Docs*, *Google Sheets*, and so forth. *Google Classroom* also connects to other programmes like *Quizizz*, *Kahoot*, *Quizlet*, *Plickers*, *Ed-Puzzle*, and others that use the program's features as a social network, a tool for sharing educational materials, an interactive discussion board, data storage, and reinforcement training (Kaviza, 2020).

The choice of instructional apps should be appropriate and readily available to students in order to ensure that learning outcomes may be attained. The use of several learning tools during the epidemic is possible, including *WhatsApp*, *e-learning*, *WhatsApp groups*, *Google Classroom*, *email*, *Telegram*, *Google Forms*, *Zoom*, *Meet*, *Webex Meet*, and others (Baroroh, 2020). The majority of pupils at schools have their own smartphones, and each one has the *Telegram* and *WhatsApp* apps installed (Syed, 2017). Both of these programmes can encourage pupils to learn in a fun way (Idris & Rosli, 2019). As a result of the ability to virtually meet other users, Mahlan & Hamat (2020) contend that learning directly through the *Zoom* and *Meet* applications is superior to learning through *WhatsApp*. *Zoom*, however, has a limited time for use and a small user base, which makes it appear to be a paid service.

In addition, the Digital Educational Learning Initiative Malaysia (DELIMa), Microsoft Teams, EduwebTV, Buku Teks Digital, CikgooTube, and Didik TV are among the channels listed by the MoE. The Ministry of Education and Culture has also developed a variety of learning materials to aid in the implementation of PdPr through RTM Okey channels, namely Education TV and ASTRO Tutor TV, as well as conducted a number of courses to teach teachers how to use digital learning platforms (Mohd & Mansor, 2021).

Technological Knowledge (PT)

The major tool utilised in this study to determine the level of technology knowledge (PT) of Arabic language teachers towards PdPr is the Content Pedagogy Technology Knowledge model (PTPK), developed by (Mishra and Koehler, 2006). Technology, pedagogy, and content are the three sciences that make up the acronym PTPK. The study's purpose is to examine the level of PT components in the web application software used by Arabic instructors in elementary schools to conduct PdPr. Aspects of technology knowledge (PT), pedagogical technology knowledge (PTP), and content technology knowledge (PTK) are the three main categories of technology skills in PdPr.

According to Koehler and Mishra (2007), PT in teaching is the understanding of how to use various forms of technology, such as tools, procedures, and resources. Planning and delivering online classes utilising basic digital tools including the internet, digital video, interactive whiteboards, and software programmes is one way to adapt to current changes. These technological skills are crucial for teachers to understand the limitations and benefits of employing particular technologies in particular contexts and courses (Nur, 2021).

The stages of teachers' use of technology were categorised into four categories by Mandinach and Cline (1992), namely survival, mastery, impact, and invention. The survival level denotes a teacher's lack of knowledge, lack of confidence, and fear of incorporating technology. Teachers must adhere to the specified training or courses in order to advance. In connection with that, the pandemic situation has compelled teachers to voluntarily adapt a variety of internet tools. *SurveyMonkey*, *Google Forms*, *Typeform*, video (Hartsell & Yuen, 2006), and student engagement tools like *Kahoot*, *Prezi*, *Powtoon*, and others are some of the online programmes that can be used to produce surveys (Plump & LaRosa, 2017).

The Malaysian Education Development Plan 2013–2025 (PPPM) is the most recent plan for developing modern education in this nation. Understanding the existing performance and

the obstacles to raising teacher standards or overall quality is one of the key goals of the action plan. The education system must develop in accordance with what is required for the nation's development. Since March 2017, SKPMg2 has been in use in order to improve the calibre of teacher instruction. It serves as a self-assessment tool for more systematic management and aids schools in identifying instructors' areas of strength and need for development (Wan & Mohd, 2019). The parts of teachers as planners that are deemed appropriate are explored for the purposes of this study, even if there are five standard management tools that reflect SKPMg2 as a whole in the context of the implementation of PdPr Arabic.

Self-Efficacy

Tscannen-Moran (2001) created the Teacher Self-Efficacy Model, which includes the following three situations: teaching strategies, classroom management, and student engagement. He defines teacher self-efficacy as the confidence a teacher has in their ability to instruct and inspire students, regardless of the students' talents or familial circumstances. The term "teaching strategy" describes how instructors manage and oversee their instructional delivery. It has to do with the teacher's capacity to employ instructional techniques to deal with learners who exhibit a range of accomplishments, gain their acceptance, and employ a variety of assessment techniques in the classroom. In this study, the concept of student engagement refers to the degree to which a teacher can adapt their teaching methods to the PdP of the 21st century while also adapting the PdP materials they utilise. Effective PdPr can be implemented depending on the students' skill level when thorough planning is done. It is not unexpected that student interest in PdPr is growing because teachers have the perseverance to foster a desire to study among pupils (Mushir & Muhammad, 2019).

Fredericks et al (2004) classified student participation into three categories: emotional, behavioural, and cognitive. Cognitive engagement refers to the level of effort, readiness, and cognitive resources that students focus on in order to acquire the necessary knowledge and skills (Jamidi & Surat, 2021). Behavioural engagement refers to student activities and efforts. Emotional engagement refers to motivation, commitment, and a sense of comfort and togetherness. In connection with that, the pandemic situation has compelled teachers to voluntarily adapt a variety of internet tools.

According to some study, additional factors, such as teachers' attitudes regarding PdPc, have an impact on how Arabic language teachers teach (Abdul et al., 2019). In other words, self-efficacy influences how effectively teachers teach, which in turn affects how well students learn. High-performing Arabic teachers will carefully prepare PdPc methods and activities, be creative, effectively communicate instructions, be eager to motivate students towards Arabic PdPc, and have a high degree of commitment (Farihah, 2019). In fact, earlier research has demonstrated a connection between a teacher's level of self-efficacy and their familiarity with educational technology (Zhang, 2022).

The teacher's technological expertise is crucial in the context of online PdPr since every piece of knowledge they impart needs hardware or software that is related to technology. Online learning studies have received a lot of attention. Among them are Bani's study (2020); Mesman & Majid's (2021), Awang et al.'s (2018) assessment of university students' perceptions, Kirin et al.'s (2021); Li et al.'s (2020); Muhammad et al.'s (2020) identification of student readiness, and Feng et al.'s (2021) investigation of primary school students' motivation. In contrast, few research have looked at how teachers educate in the

setting of PdPr (Mohd et al., 2021). Therefore, the purpose of this study is to identify the level of technology application knowledge among primary school Arabic teachers in the state of Johor who conduct PdPr online.

PdPr implementation is a difficult process in the teaching of foreign languages. The teacher's skill is closely tied to his effort and earnestness when facing problems in addition to his knowledge of technology. Teachers who have self-assurance and faith in their talents can have an impact on students' use of digital technologies. Effective educators are constantly prepared with a variety of curricular, pedagogical, and technological expertise. The performance and implementation of a work might be affected by self-efficacy. A research to determine the level of technological knowledge (PT) of teachers who use PdPr must be done after this issue has been investigated. Additionally, a correlation study was carried out to determine the connection between PT and teacher self-efficacy in implementing PdPr.

Methodology

This study used a cross-sectional survey design. Data obtained through questionnaire instruments were analysed statistically descriptively and inferentially using Statistical Package for the Social Sciences (SPSS). The focus of this study is to obtain the level of technology knowledge (PT) of teachers in Arabic PdPr through the mean score value obtained from each item and the overall mean score value. This study involves the population of national primary school Arabic teachers in the northern zone of the state of Johor, Malaysia. The suggested sample size is 109, according to Krejcie and Morgan's (1970) calculation of the sample size. However, this study brings the total number of Arabic language teachers to 111. The teachers are located in Muar (54), Segamat (33), and Tangkak (22), three districts in the northern part of Johor. The number of each sub-sample was determined according to the proportion of each sub-population, and this method of stratified random sampling was used to calculate the size of the overall study sample. A questionnaire instrument with two primary sections is used in this investigation. A 26-item questionnaire on the level of technology proficiency (PT) of Arabic teachers makes up the first section of the study. This PT questionnaire is adapted from the study of Abd. Majid (2017). There are three constructs under PT: technology knowledge (12 items), pedagogical technology knowledge (PTP) of 8 items, and content technology knowledge (PTK) of 6 items. The second part is related to the level of self-efficacy of Arabic teachers, adapted from Hazram's study 2019. This section contains three constructs: teaching strategies (10 items), student engagement (7 items), and online class management (5 items). A pilot study was conducted on 33 Arabic teachers working in Johor Bahru. The instrument has gone through a validation process through the evaluation of two experts, consisting of two lecturers who serve at teacher education institutions and universities. Both experts have expertise in their respective fields, namely extensive experience in the field of curriculum and the Arabic language. The Cronbach's alpha coefficient value to test the reliability of the instrument for the Technology Knowledge (PT) category is 0.82, and the self-efficacy category is 0.94. Cronbach's Alpha value illustrates that the research instrument has very good and effective reliability values. This study also complies with the data acquisition procedure of the Malaysian Ministry of Education (KPM) and received approval from the Ministry of Education on February 12, 2020 (Ref: KPM.600-3/2/3-eras (11507)).

Research Findings and Discussion

Descriptive analysis shows that the level of technology knowledge of Arabic language teachers towards PdPr as a whole is at a moderate level, with a mean score= 3.62 and a

standard deviation = 0.48. This demonstrates that the teacher has the required level of technological knowledge for one who has been taught to conduct Arabic PdPr online utilising particular applications of interest.

Table 1

Level of PdPr Technological Knowledge of Arabic Teacher

No.	Component	Mean	Standard Deviation	Interpretation
1.	Technological Knowledge (PT)	3.70	0.60	Moderate
2.	Pedagogical Technology Knowledge (PTP)	3.59	0.71	Moderate
3.	Content Technology Knowledge (PTK)	3.48	0.63	Moderate
Overall Mean		3.62	0.48	Moderate

The level of technological expertise of Arabic teachers is displayed in Table 1, where the level of technological knowledge is moderate (mean = 3.70, sd = 0.60), PTP is moderate (mean = 3.59, sd = 0.71), and PTK is moderate (mean = 3.48, sd = 0.63) based on the mean value of each construct. The resulting data demonstrates that Arabic teachers are capable of managing PdPr when they are able to engage students online and teach utilising visual resources. but not yet to the point of becoming familiar with numerous technological platforms and developing applications. Basic knowledge of technology, such as using Google Classroom and communication applications such as Telegram and WhatsApp, is mastered in a simple way to meet the needs of a teacher for teaching and learning. This level shows that Arabic teachers only use technological mediums for PdPr and are not able to act creatively and innovatively due to a lack of diverse knowledge to diversify teaching forms and materials.

This result is in line with the research by Muhammad and Zawawi (2018), who discovered that teachers have modest levels of technological proficiency. This study supports the findings of Muhammad et al (2021), who discovered that Arabic language teachers use technology at a modest degree. In order to address the demands of teaching and studying Arabic, the respondents are a group of Arabic language teachers in the state of Johor who have a modest level of proficiency in TPACK skills.

According to a study by Sobri (2020), Arabic language teachers are only proficient in technology (PT). Technology-based learning requirements for the 21st century should be met in order to develop a generation that is competitive, creative, and innovative and can generate quality work. Additionally, Wenno et al (2022) noted that in order to develop knowledge and critical thinking, today's teachers must be proficient in technology and even have the initiative to innovate.

This study also discovered that the capacity of Arabic teachers to access the internet and use certain communication tools to conduct PdPr online is their key area of technological proficiency (PT). The Telegram app is the platform of choice for most teachers. The Telegram programme makes it easier for teachers to complete duties and deliver learning materials, whether through video calls, message sending, voice recordings, or video recordings. Images, audio music, and films are all extra materials that teachers can give their pupils (Khalid et al., 2015).

In addition, the use of the Google Meet (GM) platform among Arabic language teachers is at a high level. Findings from the study of Azreen (2021) and the qualitative study of Noor et al (2021) support the use of GM as preferred by Arabic language teachers because the

software is more easily accessible, has easier interaction, has a faster response, saves time, can be discussed quickly, and when you don't understand, you can keep asking so that it's easier to understand to complete the given task. for elementary school students. This opinion is supported by Zakaria et al (2020), who stated that the GM platform is a user-friendly platform and is able to improve speaking skills among primary school students.

The level of self-efficacy of Arabic language teachers towards PdPr is at a high level (mean = 3.90, sp = 0.156). The mean score, which ranges from 3.51 to 5.00, has a high interpretation value, according Silins and Murray-Harvey's (2000) specifications. This demonstrates the high level of confidence held by Arabic language teachers when holding PdPr.

Table 2

Level of Teacher Self-Efficacy in the implementation of PdPr (N=111)

Teacher Self-Efficacy	Mean (M)	Standard Deviation (sd)	Interpretation
Teaching Strategy	3.88	.237	Tinggi
Online class management	3.98	.285	Tinggi
Student engagement	3.86	.199	Tinggi
Overall Mean	3.90	.156	Tinggi

Table 2 shows the overall mean score measuring teacher self-efficacy obtained a value of mean = 3.90 and sd = 0.16, which shows that the level of self-efficacy of primary school Arabic teachers in the northern zone of the State of Johor is at a high level. Online class management is the highest (M = 3.98, SD = .285), followed by the teaching strategy (M = 3.88, SD = .237) and student engagement (M = 3.86, SD = .199). From the analysis also presented, primary school teachers in the northern zone of the Johor have a high level of self-efficacy for all the constructs measured.

Given that every construct created from the teachers' self-efficacy is likewise at a high level, primary school teachers in the northern zone of Johor have a high degree of self-efficacy overall. The level of self-efficacy displayed by Arabic teachers indicates that they are comfortable using certain programmes to develop PdPr activities that work well for students. According to the results of the study, primary school Arabic teachers in the North Zone of Johor generally have a high level of self-efficacy. This level, however, marks the start of the high category. It is evident that Arabic teachers are highly confident in their capacity to handle the challenge of instructing Arabic at the secondary level. The majority of these teachers acknowledge that they can handle difficulties and accomplish learning objectives with sincere attempts, as measured by the mean score they received. The results of this study also indicate that Arabic teachers are self-assured and think they are capable of managing the classroom well.

The concept of student engagement demonstrates that teachers have belief in their capacity to inspire pupils, persuade them to appreciate education, and pique their interest in PdPr online. The results of this survey are consistent with those of a 2013 study (Noornajihan & Ab, 2013), which found that Peninsular Malaysia has a high level of Islamic education teachers (GPI). In this regard, Woo (2018) says that teachers may handle all pressures through engaging teaching practises, even though they use technology in the classroom. Students' engagement in every learning activity is a result of the teacher's skill in identifying their critical thinking. Students' originality and invention, which are being emphasised more and more in

line with the organisation's goals, can be indirectly increased by this situation. Teachers can use a variety of applications to make sure that online class management is done in a planned manner. According to research that supports this (Albantani & Madkur, 2017), educators can use a range of learning models to implement learning strategies based on YouTube videos that make learning more enjoyable and relevant.

The correlation between the two study variables—technological knowledge and self-efficacy of Arabic teachers employed in the northern region of Johor—was then analysed using a Pearson correlation test. Table 3 is used to determine the strength of the correlation between the two variables.

Table 3

Correlation between Technology Knowledge and Teacher Self-Efficacy.

Dimension	Teacher Self-Efficacy.		Sig**
	r	r ²	
Technological Knowledge and Teacher Self Efficacy	0.331	0.331	0.00

N = 111, Note: **correlation is significant at the $p < 0.5$ level

The results of the Pearson correlation analysis found that there is a significant relationship between technology knowledge and the self-efficacy of Arabic teachers ($r = 0.331$, $p = 0.5$). But the relationship rate is at a moderate level. This explains that the PT that exists in Arabic teachers has a simple connection with self-efficacy. While the positive relationship obtained from the results of this study explains that the higher the level of technology knowledge of the teacher, the higher the level of self-efficacy possessed by a teacher, in other words, teachers' technological knowledge can increase the self-efficacy of Arabic teachers in conducting PdPr.

Therefore, this study shows that this significant relationship is in line with the social cognitive theory of Bandura (1997), which relates the effect of self-efficacy to psychological conditions. High efficacy shows that the Arabic language teacher has faith in his ability to effectively deal with certain tasks he performs (Woolfook, 1998). In addition, it shows that the teacher is confident in his ability to mobilise motivation, cognitive resources, and actions that will be taken for the current task he is responsible for (Bandura, 1989). A high level of efficiency is contributed by all three dimensions, namely the dimension of student engagement, teaching strategies, and class management. The dimension of student engagement shows that teachers are confident in their ability to motivate students, make students believe they can do school work, convince students to value learning, and help families make their children study well at school.

Conclusion

This study was carried out to identify the technological knowledge of Arabic teachers in the northern zone of the Johor, especially the Content Pedagogy Technology Knowledge component (PTPK), which consists of Technology Knowledge (PT). Arabic language teachers in the northern zone of the State of Johor can be classified as teachers who have moderate technology knowledge (PT) of the PdPr they implement. This study also presents a paradigm shift in an effort to improve the knowledge and skills of PT Arabic teachers, which was found to be able to increase the self-efficacy of teachers in PdPr. Although teachers were found to have a moderate level of PdPr technology knowledge, there are several things that need to

be noted, namely the knowledge of content technology and pedagogy that needs to be improved. This study also makes a significant contribution to the importance of shaping teachers' self-efficacy by improving technology knowledge so that PdPr can be carried out more effectively.

References

- Abdul, R. Z., Noorshamsinar, Z., Hasmadi, H., Muhammad, R., & Mohd, R. I. (2019). Pengajaran Bahasa Arab Di Malaysia: Permasalahan Dan Cabaran Teaching Of Arabic In Malaysia : Problems And Challenges. *Jurnal Pengajian Islam*, 12(1), 47–57.
- Abdul, W. S., Ismail, A., Almekhlafi, A. G., & Al-mekhlafy, M. H. (2010). Teachers' perceptions of the use of technology in teaching languages in United Arab Emirates' schools. *International Journal for Research in Education*, 27, 37–56.
- Albantani, A. M., & Madkur, A. (2017). Musyahadat Al Fidyu: Youtube-Based teaching and learning of Arabic as foreign language (AFL). *Dinamika Ilmu*, 17(2), 291–308.
- Awang, H., Sheik, O. W. R., & Mat, A. Z. (2018). a conceptual model to evaluate virtual learning environment among Malaysian teachers. *Journal of Telecommunication, Electronic and Computer Engineering*, 10 (2–4), 59–63.
- Awang, H., Mat, A. Z., Sheik, O. W. R., Kamaruddin, E., Abdulrazak, F. S. M., & Khamis, S. (2020). Analisis kes persekitaran pembelajaran maya-frog serta strategi untuk melestarkan penggunaan google classroom dalam kalangan guru. *Journal of Educational Research and Indigenous Studies*, 1(1), 1–19.
- Azhar, Z., & Hassan, B. (2011). Keperluan aktiviti komunikatif sekolah menengah. *GEMA Online Journal of Language Studies*, 11, 67–82.
- Azreen, S. H. (2021). Teaching Arabic language from home for secondary schools during pandemic covid-19 lockdowns in Malaysia: practices and challenges. *Prosiding Seminar Inovasi Pendidikan Islam dan Bahasa Arab*, 113-117.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *The self in social psychology. Psychological Review*, 84 (2), 191–215.
- Bani, H. M. S. (2020). Pelaksanaan PdPc Dalam Talian (OLL) Semasa Perintah Kawalan Pergerakan (PKP) Fasa 1 Dan 2 Covid-19 (Implementation of PdPc OLL During COVID-19 Movement Control Order Phase 1 And 2). *Myjms.Moe.Gov.My*, 2(2), 213–221.
- Baroroh, I. (2020). Mengoptimalkan proses pembelajaran dengan media daring pada masa pandemi Covid-19. *Sipatokong BPSDM Sulawesi Selatan*, 1(3), 227–232.
- Corry, M., & Stella, J. (2018). Teacher self-efficacy in online education: A review of the literature. *Research in Learning Technology*, 26(1063519), 1–12.
- Farihah, H. (2019). *Efikasi sendiri guru bahasa arab dalam pengajaran Nahu Kurikulum Bersepadu Dini*. Doktoral Thesis, Universiti Kebangsaan Malaysia, Bangi: Malaysia
- Fariza, K., Md, Y. D., & Aidah, A. K. (2015). Pemilihan aplikasi teknologi sebagai medium perkongsian maklumat oleh pelajar siswazah universiti. *ASEAN Comparative Education Research Network Conference 2015, October*, 2011–2027.
- Feng, H. Y., Fan, J. J., & Yang, H. Z. (2013). The relationship of learning motivation and achievement in EFL: Gender as an intermediated variable. *Educ. Res. Int.* 2, 50–58.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59–109.
- Hartsell, T., & Yuen, S. (2006). Video streaming in online learning. *AACE Journal*, 14(1), 31-43

- Hazram, I. (2019). *Pengetahuan teknologi pedagogi isi kandungan, efikasi sendiri terhadap teknologi dan keinginan menggunakan teknologi bakal guru Matematik sekolah rendah*. Master Dissertation, Universiti Kebangsaan Malaysia.
- Horvitz, B. S., Beach, A. L., Anderson, M. L., & Xia, J. (2015). Examination of faculty self-efficacy related to online teaching. *Innovative Higher Education*, 40 (4), 305–316.
- Idris, Z., & Rosli, R. (2019). Whatsapp: penggunaannya dalam membantu pembelajaran matematik tambahan dalam kalangan pelajar sekolah menengah tahfiz kerajaan di Kuala Lumpur. *E-Prosiding Persidangan Antarabangsa Sains Sosial Dan Kemanusiaan, April*, 78–83.
- Ismail, N. S., Ahmad, N. Z., Mohd, K. N., Fauzi, A. (2021). The use of Google Meet in learning Arabic language during Covid-19 Pandemic. *International Journal on E-Learning and Higher Education* 15, 4-19
- Jamidi, F. J. Bin, & Surat, S. (2021). Efikasi sendiri dan keterlibatan pelajar belajar dalam talian sepanjang tempoh kawalan pergerakan COVID-19. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 6(8), 80–92.
- Kamarulzaman, A. G., & Saiful, N. S. (2019). Amalan pengajaran kemahiran bertutur bahasa arab dalam kalangan guru J-QAF sekolah kebangsaan. *The Online Journal Of Islamic Education*, 7(1), 1–14.
- Kaviza, M. (2020). Kesiediaan murid terhadap penggunaan aplikasi Google Classroom sebagai platform pembelajaran sejarah. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 5(4), 108–115.
- Kirin, A., Husen Isma'il, F., Masruri, M., Marpuah, S., & Mohammad, C. A. (2021). Pengajaran dan pembelajaran metode Face To Face dan PJJ Online: Perbandingan dan impak terhadap students UTHM Johor Malaysia semasa pandemi Covid-19. *Jurnal Studi Guru Dan Pembelajaran*, 4(1), 206–217.
- Koehler, M. J., & Mishra, P. (2007). What is Technological Pedagogical Content Knowledge (TPACK)? *Journal Of Education*, 193(3), 60–70.
- Krejcie, R. V., & Morgan, D. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- Kementerian Pelajaran Malaysia (KPM). (2020). *Manual PdPr*. 4(3), 57–71. <https://doi.org/10.1177/0013164407003000308>
- Li, M., Ziyue, & Miaomiao. (2020). Student-centred webcast home based learning model and investigation during the covid-19 epidemic. *Inteligencia Artificial*, 23(66), 51–65.
- Littlewood, W. T. (1981). *Communicative language teaching: An introduction*. Cambridge: Cambridge University Press.
- Ma, K., Chutiyami, M., Zhang, Y., & Nicoll, S. (2021). Online teaching self-efficacy during COVID-19: Changes, its associated factors and moderators. *Education and Information Technologies*, 26(6), 6675–6697.
- Mahlan, S. T., & Hamat, M. (2020). Pengajaran Dan Pembelajaran Dalam Talian Semasa. *E-Learning@CS*, 14–22.
- Mandinach, E. B., & Cline, H. F. (1992). The Impact of Technological Curriculum Innovation on Teaching and Learning Activities. *Paper presented at the Annual Conference of the American Educational Research Association (San Francisco, CA, April 20-24, 1992)*.
- Mesman, N. S., & Majid, A. Z. (2021). Kajian kesiediaan pelajar mengikuti pembelajaran dalam talian semasa Perintah Kawalan Pergerakan (PKP) membendung Covid-19 Fasa 2. *International Journal of Education and Pedagogy*, 3(1), 195–202.

- Mishra, P., & Koehler, M. J. (2006). Technological Pedagogical Content Knowledge: A Framework for Teacher Knowledge. *Teachers College Record*, 108(6), 1017–1054. <https://doi.org/10.1111/j.1467-9620.2006.00684.x>
- Mohd, N. N., & Mansor, M. (2021). Cabaran guru dalam melaksanakan Pengajaran Dan Pembelajaran Di Rumah (PdPr): Suatu pemerhatian awal. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 6(7), 416–421.
- Mohd, R. S., Rohizani, Y., & Azlinda, B. N. (2021). Pelaksanaan pengajaran guru cemerlang dalam mata pelajaran bahasa Melayu ketika Pandemik COVID-19: Satu kajian kes. *Journal of Malay Language, Education and Literature*, 6812, 21–32.
- Mohd, S. F. I., Md, G. J., Wan, I. W. N. H., Alias, M., & Rahim, A. N. S. (2020). The impacts of Covid-19 through online learning usage for tertiary education in Malaysia. *Journal Of Critical Reviews* 7 (8), 147-149.
- Muhammad, R. A. M. (2017). *Pengetahuan Teknologi Pedagogi Kandungan Dan Kreativiti Pengajaran Dalam Kalangan Guru Bahasa Arab di Malaysia*. Doktoral Thesis, Universiti Malaya.
- Muhammad, R. A. M., & Zawawi, I. (2018). Pengetahuan teknologi guru bahasa arab dan hubungannya dengan kreativiti pengajaran di Malaysia. *Jurnal Islam dan Masyarakat Kontemporari* 18 (1), 1–13.
- Muhammad, I. A. G., Nur, A. A., & Nur, H. A. A. (2020). penerimaan pelajar terhadap penggunaan microsoft teams dalam pembelajaran bahasa arab komunikasi sepanjang pandemik Covid-19. *E-Proceeding: Seminar Antarabangsa Islam Dan Sains (SAIS 2020), 2019*, 718–728.
- Muhammad, S. S., Abdul, R. Z., Yaakob, H., Zulkefli, H., & Taufik, I. (2021). Employing Technological Pedagogical Content Knowledge (TPACK) skill among teachers in preparing online school assessment for home-based learning. *Ijaz Arabi Journal of Arabic Learning*, 4(2), 285–298.
- Mukhtar, M. I. (2017). Contextual teaching and learning method in studying Arabic. *Studia Islamika*, 14, 175–188.
- Najiba, A., Samsilah, R., Abdullah, M. C., & Maming, P. (2014). The effect of differentiated learning method in teaching Arabic language on students motivation. *Journal of Social Science Research*, 5(1), 671–678.
- Narayanaswamy, V. R., & Harinarayana, N. S. (2016). Online survey tools: A case study of Google Forms Online. *The National Conference On "Scientific, Computational & Information Research Trends in Engineering, GSSS-IETW, Mysore (2016, January), December*, 1–12.
- Noor, M. M. K., Zaharah, H., Abdul, M. S., & Nurul, N. A. L. (2021). Pendekatan heutagogi dalam Pengajaran dan Pembelajaran di rumah (pdpr) menggunakan m-pembelajaran. *Journal of Islamic Educational Research (JIER)* 7, 44-65.
- Noornajihan, J., & Ab, H. T. (2013). Hubungan antara efikasi sendiri dengan kualiti guru Pendidikan Islam sekolah menengah kebangsaan Malaysia. *Journal of Islamic and Arabic Education*, 5(1), 41–60.
- Nur, F. A. A. (2021). Analysis of the level of Technological, Pedagogical, and Content Knowledge (TPACK) among lecturers in their teaching practices (Arabic). *The Online Journal of Islamic Education* 9(1), 32–45.
- Nur, H. H., & Masayu, D. (2020). Pengajaran dan pembelajaran dalam talian semasa perintah kawalan pergerakan. *Jurnal Pendidikan Awal Kanak-Kanak Kebangsaan (Special Issue)*, 9, 18–28.

- Nurhalimah, S., Dedek, F., Annur, F., Ahmad, S. A., & Ahmad, F. (2016). NABILAH (Nata 'allam al- 'Arabiyah Bil-al'ab Al-mumthi'aH) program and students achievements in learning Arabic language: A preliminary study. *International Conference on Language and Human Thoughts: Language and Social Sciences in Civilization Development*, Indonesia: Universitas Negeri Jakarta, 9-10 August 2016.
- Perveen, A. (2016). Synchronous and asynchronous e-language learning: a case study of virtual University of Pakistan. *Open Praxis*, 8(1), 21-39.
- Plump, C. M., & LaRosa, J. (2017). Using Kahoot! in the classroom to create engagement and active learning: A game-based technology solution for eLearning novices. *Management Teaching Review*, 2 (2), 151-158
- Poulou, M. S., Reddy, L. A., & Dudek, C. M. (2019). Relation of teacher self-efficacy and classroom practices: A preliminary investigation. *School Psychology International*, 40(1), 25–48.
- Rosni, S., Fariza, P., Saad, M. N. S., Ali, M. S., Darmi, R., & Harun, H. (2016). Effective methods in learning Arabic language as a foreign language. *Mediterranean Journal of Social Sciences*, 7(3), 349–355.
- Richards, J. (2001). *Curriculum Development in Language Teaching (Cambridge Professional Learning)*. Cambridge: Cambridge University Press. doi:10.1017/CBO9780511667220
- Salmon, G. (2013). *E-tivities: The Key to Active Online Learning* (2nd ed.). Routledge
- Sobri, M. (2020). Mewujudkan kemandirian belajar melalui pembelajaran berbasis daring. *Jurnal Pendidikan Glasser*, 4(4), 64–71.
- Silins, H., & Murray-Harvey, R. (2000). Students as a central concern: School, students and outcome measures. *Journal of Educational Administration*, 38(3), 230-246.
- Syed, C. S. L. (2017). Pengajaran dan pembelajaran melalui aplikasi WhatsApp dan Telegram di universiti swasta. *Jurnal Pendidikan Malaysia*, 42(2), 87-97.
- Tesar, M. (2020). Towards a post-covid-19 'new normality?': Physical and social distancing, the move to online and higher education. *Policy Futures in Education*, 18(5), 556– 559.
- Tschannen-Moran, M., Hoy, A. W., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68(2), 202–248.
- Vasanth, R. N., & Harinarayana, N. S. (2016). Online survey tools: A case study of Google Forms. *Paper presented at the National Conference on "Scientific, Computational & Information Research Trends in Engineering, GSSS-IETW, Mysore*.
- Wan, H. W. N., & Mohd, Y. N. (2019). The effect of instructional coaching on the school middle leaders. *Journal of Educational Research and Indigeneous Studie*, 1 (1), 1-9.
- Watson, J. F., Gemin, B., & Ryan, J. (2008). Keeping pwith K-12 Online Learning: A Review of State-Level Policy and Practice, 2008.
- Wendy, T. (2021). Communicative Language Teaching (CLT) In the context of online learning: a literature review. *International Journal of TESOL & Education*, 1(2), 65– 71.
- Wenno, E. C., Limba, A., Silahoy, Y. G. M. (2022). The development of physics learning tools to improve critical thinking skills. *International Journal of Evaluation and Research in Education (IJERE)*, 11 (2), 863-869
- Woo, P. S. (2018). Relationship between teachers' self - efficacy and instructional strategies applied among secondary school teachers in implementing STEM education. *2018 IEEE International Conference on Teaching, Assessment, and Learning for Engineering (TALE), December*, 454–461.
- Yamagata-Lynch, L. (2014). Blending online asynchronous and synchronous learning. *International Review of Research in Open and Distributed Learning*, 15(2), 189–212.

- You, E. C., & Choon, K. T. (2019). Pengetahuan teknologi pedagogi kandungan di Malaysia: Satu kajian meta analisis. *Journal of ICT In Education, 6*, 86–95.
- Zaid, A. M. N., Nik, M. R. N. Y., Irma, M. M. Y., & Kamarudin, M. Y. 2016. Foreign language vocabulary learning strategies in Malaysia. *Creative Education, 07(03)*, 428–434
- Zakaria, S., Baskaran, S., Malar, M., Yaakub, A. M., Chin, S. F., & Othayakumaran, K. (2020). Kesediaan penggunaan Google Meet sebagai platform Institut Pendidikan Guru Kampus Sultan Abdul Halim. *Proceedings of International Conference of The Future Education Iconfed 2020, November*, 17–18.
- Zhang, Y. (2022). The effect of on educational technology on EFL learners' self- efficacy. *Frontiers in Psychology, 13*, 1–8.