

The Level of Attitude of Malay Language Teachers in Applying Digital Learning in Malay Language Teaching

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Abstract

The increasing development of Information and Communication Technology (ICT) has spurred the growth of digital learning initiatives in Malaysia. However, despite the potential benefits of digital learning, many teachers still prefer traditional teaching methods. This study seeks to explore the attitudes of Malay language teachers towards digital learning, particularly in the context of teaching the Malay language. Using a quantitative approach with descriptive analysis, data was collected from 97 randomly selected Malay language teachers through a 5-point Likert scale questionnaire. The findings of the study reveal that Malay language teachers exhibit high levels of both affective and cognitive attitudes towards digital learning. Specifically, the mean level of affective attitude is recorded at 4.73 (SD=0.397), while the mean level of cognitive attitude is 4.63 (SD=0.41). These results indicate a positive disposition towards the integration of digital learning methods among Malay language teachers. The study's findings hold significant implications for key stakeholders, including the Ministry of Education (KPM) and teachers themselves. By recognizing and understanding the positive attitudes of Malay language teachers towards digital learning, educational institutions and policymakers can devise strategies to further support and promote the adoption of digital learning practices. Additionally, exploring the effectiveness of different professional development approaches in enhancing teachers' digital pedagogical practices and student outcomes could provide valuable insights for educational stakeholders. In conclusion, this study underscores the importance of considering teachers' attitudes towards digital learning in the context of Malay language education. By addressing the implications identified in this research, stakeholders can work towards fostering a supportive environment that promotes effective integration of digital technologies in teaching and learning practices.

Keywords: Information and Communication Technology (ICT), Digital Learning, Level of Affective Attitude, Level of Cognitive Attitude, Malay Language

Introduction

In Malaysia, the field of education is advancing rapidly. The integration of Information and Communication Technology (ICT) in teaching has significantly enhanced the effectiveness of educational methods (Mohd Aiman, 2018). The use of ICT facilitates digital learning, providing quick access to information from a variety of sources (Fatira et al., 2021). The concept of 21st-century learning, which incorporates multimedia elements through digital learning, is strongly recommended in the educational framework (Nawi, 2020). Implementing digital learning elements not only supports 21st-century learning but also promotes more effective teaching and learning practices.

The development of digitization offers a variety of teaching aids that can be effectively utilized. This encourages teachers to emphasize the concept of 21st Century Learning in dynamic teaching and learning practices (Shirley et al., 2022). Implementing digital learning elements in Malay language teaching and learning practices sessions helps foster student enthusiasm and engagement. Teachers act as guides, using the latest interactive applications to stimulate students' understanding, which aligns with the growing need for digital technology in daily activities (Fatira et al., 2021). Therefore, the application of digital learning underscores its importance and effectiveness in enhancing the teaching and learning practices process.

The diversity of digital applications should be introduced to Malay language teachers early in their education. Effective application of pedagogical knowledge creates opportunities to enhance the teaching and learning process among teachers (Ramli et al., 2019). However, the usage rate of digital learning aids in teaching and learning process remains low and inconsistent. The evolving educational landscape should incentivize teachers to diversify their teaching resources (Shirley et al., 2022). Therefore, this study aims to assess the attitudes of Malay language teachers towards integrating digital learning into their teaching practices.

Problem Statement

Despite the rapid advancement of digitization in education, the integration of digital learning tools in the teaching practices of Malay language teachers remains suboptimal. While the diverse applications of digital technology offer significant potential for enhancing the learning and teaching process, their adoption and consistent use are still low. This inconsistency hinders the effective implementation of 21st Century Learning principles, particularly in the context of teaching the Malay language. There is a critical need to assess the attitudes of Malay language teachers towards the use of digital learning tools. Understanding these attitudes is essential to developing strategies that can foster greater engagement with digital resources, ultimately improving the quality of education and aligning with contemporary technological demands (Ching & Badusah, 2010).

The development of digital learning is now well-established and has brought numerous applications and facilities to the educational field. The implementation of ICT in teaching the Malay language has shown a positive impact, increasing both student and teacher engagement in the learning and teaching process (Bakthaselvan et al., 2022). Digital learning tools such as interactive software, online resources, and multimedia presentations provide dynamic and interactive environments that enhance comprehension and retention of material. These tools also offer personalized learning experiences, catering to the diverse needs of students and making education more inclusive.

However, the potential of digital learning has not been fully realized. Some teachers continue to favour traditional teaching methods, perceiving them as easier to implement (Munusamy et al., 2022). Traditional methods often involve straightforward, lecture-based instruction and the use of printed textbooks, which, while familiar and easy to manage, may not engage students as effectively as digital tools. Additionally, teachers face challenges in integrating ICT into their teaching practices. Issues such as poor internet access, insufficient electronic devices Omar et al (2021), and a lack of digital skills Nicholas et al (2022) further complicate the adoption of digital learning. Poor internet access can limit the use of online resources and communication tools, while insufficient devices mean that not all students can participate in digital activities. The lack of digital skills among teachers can lead to a reluctance to adopt new technologies, as they may feel unprepared to use them effectively.

These challenges have led to questions about the acceptance of digitization among educators. Teachers' attitudes towards digital learning are influenced by their confidence in using technology, their perceived usefulness of digital tools, and the support they receive from their institutions. If teachers view digital tools as burdensome or irrelevant, they are less likely to integrate them into their teaching practices.

Consequently, this study evaluates the affective and cognitive attitudes of Malay language teachers towards the application of digital learning in Malay language teaching. Affective attitudes refer to the emotional responses and feelings that teachers have towards digital learning, such as excitement, anxiety, or enthusiasm. Cognitive attitudes involve teachers' beliefs, knowledge, and perceptions about the effectiveness and importance of digital learning tools. By understanding these attitudes, the study aims to identify the barriers and facilitators to the adoption of digital learning, providing insights that can inform professional development programs, policy-making, and the design of educational technologies tailored to the needs of Malay language teachers.

Addressing these issues is crucial for enhancing the effectiveness of the learning and teaching process. Encouraging positive attitudes towards digital learning among Malay language teachers can lead to more innovative and engaging teaching practices, better student outcomes, and a more technologically adept teaching workforce. By fostering a supportive environment for digital learning, educational institutions can ensure that both teachers and students benefit from the advancements in educational technology, ultimately contributing to the overall improvement of the education system.

Objectives and Research Questions

Objectives

The objectives of this study are as follows

- i. To identify the level of affective attitudes of Malay language teachers towards applying digital learning in Malay language teaching.
- ii. To identify the level of cognitive attitudes of Malay language teachers towards applying digital learning in Malay language teaching.

Research Questions:

The research questions for this study are as follows:

- i. What is the level of affective attitudes of Malay language teachers towards applying digital learning in Malay language teaching?
- ii. What is the level of cognitive attitudes of Malay language teachers towards applying digital learning in Malay language teaching?

Literature Review

In a study conducted by Mahamod et al (2021), titled "Attitudes and Motivation of Primary School Students towards Online Malay Language Learning during the Movement Control Order (MCO)", aspects of attitude among students were explored. This quantitative survey aimed to identify the level and differences in attitudes and motivation of primary school students towards Malay language learning during the implementation of the PKP. Utilizing a survey instrument comprising 20 items divided into two constructs, attitude and motivation, the study involved 110 Year 5 students from a national school in Malacca, selected through random sampling. Results revealed that primary school students exhibited positive attitudes and high motivation towards online Malay language learning during the MCO period. Additionally, the study found that factors such as gender and family socioeconomic status did not significantly affect students' attitudes and motivation in learning.

Similarly, Sintian et al (2021) investigated student attitudes towards digital literacy skills in Kadazan-Dusun language learning in secondary schools in Sabah, Malaysia. This quantitative study employed a Likert-scale questionnaire administered to 265 Form Two students in eight secondary schools in Sabah. Findings indicated average attitude scores ranging from 3.04 to 4.31 and digital literacy skills scores ranging from 2.57 to 4.26. The study also revealed a significant but weak positive relationship between student attitudes and digital literacy skills in Kadazan-Dusun language learning.

Abdul Rahman et al (2020) conducted a study titled "The Importance of Technological Facilities and Motivation in Shaping Students' Awareness in Digital Learning". This study aimed to examine the factors of technological facilities and motivation in shaping students' awareness in digital learning. This quantitative study utilized t-tests and Pearson correlation tests with 99 student respondents. Findings showed no significant relationship between technological facilities and students' place of residence, but a significant positive relationship was found between motivation and students' gender. Male students were more easily excited and motivated to engage in digital learning. The study also found a significant relationship between motivation and students' awareness of the importance of digital learning.

Panjaitan et al (2020) explored the influence of digital learning media and self-confidence on Islamic Education learning outcomes among children. This experimental study utilized a questionnaire as a data collection method with 32 second-grade students in Medan, Indonesia, divided into treatment and control groups. Findings indicated that students' confidence levels using animated digital learning were higher compared to those using narrative-based digital learning. The study demonstrated a significant difference between the two research findings.

Muhamad et al (2021) focused on the skills and attitudes of teachers towards the use of multimedia in teaching and learning the Quran for autistic students. This quantitative study utilized a random questionnaire survey involving 40 teachers teaching in Integrated Special Education Program (PPKI) classes. Findings indicated moderate to high levels of teacher skills and attitudes towards multimedia usage in Quranic teaching and learning. Additionally, the study found a significant relationship between teacher attitudes and skills. Overall, while teacher skills and attitudes were positive, there were weaknesses in the application of multimedia materials.

Despite extensive research on attitudes towards various subjects such as Kadazan-Dusun language, Malay language, and Quranic teaching, there remains a gap in the literature regarding attitudes towards the teaching of the Malay language. While past studies have explored factors like attitudes, motivation, digital literacy skills, and multimedia skills among students and teachers, there is limited research specifically addressing the affective and cognitive attitudes towards Malay language teaching. Therefore, there is a need for further investigation to provide a comprehensive understanding of how these attitudes influence the effectiveness of Malay language instruction. Furthermore, although past studies have offered insights into the effectiveness and suitability of digital learning media in education, there is a notable gap in research focusing on the teaching of the Malay language using digital learning platforms. While existing research has explored digital learning in various subjects, including Kadazan-Dusun language and Quranic teaching, there is a lack of studies specifically investigating the integration of digital learning tools in Malay language instruction. Hence, this research aims to bridge this gap by examining the use of digital learning in the context of Malay language teaching, thereby contributing to a more holistic understanding of digital pedagogy in language education.

Methodology

This study involved 220 Malay language teachers from the Seremban District. The sample size was determined using the Krejcie and Morgan Sampling Table (1970) and selected through a simple random sampling technique to ensure that each teacher had an equal chance of being included in the sample. This approach enhances the representativeness of the sample and the generalizability of the findings. The Technology Acceptance Model (TAM) was employed as the main theoretical framework for this research. TAM is a widely recognized model used to understand how users come to accept and use technology. It provides a useful lens for examining the factors that influence Malay language teachers' acceptance of technology in their teaching practices. A survey research approach was adopted for this study. This method is appropriate for collecting quantitative data from a large number of respondents in a systematic manner. The survey instrument was subjected to face and content validity assessments by three experts in the field. This process ensured that the survey items were relevant, clear, and adequately covered the constructs of interest. The reliability of the survey instrument was evaluated using Cronbach's Alpha, which measures internal consistency. The study achieved a high Cronbach's Alpha value of 0.928, indicating excellent reliability and suggesting that the survey instrument consistently measures the intended constructs. Data analysis was conducted using the Statistical Package for the Social Sciences (SPSS) version 22.0. Descriptive statistics, including frequency values, mean, and standard deviation, were used to summarize the data. These statistical measures provided a comprehensive overview of the responses and facilitated the interpretation of the research findings. The analysis aimed to comprehensively interpret the research findings and address the research questions posed in the study. By employing these methodologies, the study sought to provide a robust understanding of the acceptance and use of technology among Malay language teachers in the Seremban District. The systematic approach to sampling, validation, and data analysis ensured the reliability and validity of the research outcomes.

Instrument

The survey instrument for this study is an adaptation of the Attitude Motivation Test Battery (AMTB) questions, based on Mahanorsasa Muntahar's study (2012), focusing on affective and

cognitive attitudes. The adaptation and structuring of the survey ensured that it was comprehensive and specific to the context of Malay language teachers in the Seremban District. The use of a 5-point Likert scale allowed for the capture of nuanced insights into the teachers' affective and cognitive attitudes towards technology acceptance. The survey consisted of three main parts:

1. Respondent Demographics: This section collected basic demographic information about the participants, including gender and school location. This information provided context for the respondents and allowed for demographic analysis.
2. Affective Attitude Level: This section included 10 positively phrased items designed to measure the emotional responses of teachers towards the use of technology in their teaching practices. Affective attitudes encompass aspects such as enjoyment, interest, and anxiety related to technology use.
3. Cognitive Attitude Level: This section also comprised 10 positively phrased items aimed at assessing teachers' beliefs, perceptions, and knowledge about the utility and ease of use of technology in educational settings. Cognitive attitudes include aspects like perceived usefulness and perceived ease of use.

Findings and Discussion

The findings and discussion address two research objectives: the affective and cognitive attitudes of Malay language teachers towards applying digital learning in Malay language teaching.

Affective Attitude Level of Malay language Teachers Towards the Application of Digital Learning in Teaching Malay Language

Table 1

Mean and Standard Deviation for Affective Attitude Items

No	Item	Mean (M)	Standard Deviation (SD)
B1	I enjoy using digital learning.	4.67	0.473
B2	I am interested in using digital learning.	4.67	0.473
B3	I am happy using digital learning.	4.64	0.504
B4	I find it easy to use digital learning.	4.55	0.559
B5	I am confident in using digital learning.	4.58	0.517
B6	I am excited to use digital learning.	4.64	0.483
B7	I feel confident using digital learning.	4.56	0.558
B8	I have fun using digital learning.	4.64	0.483
B9	I am always ready to use digital learning.	4.63	0.507
B10	I hope to use digital learning very well.	4.65	0.501

The items with the highest mean scores were B1 ("I enjoy using digital learning") and B2 ("I am interested in using digital learning"), both with a mean score of 4.67 and a standard deviation of 0.473. This indicates a strong enjoyment and interest among the Malay language teachers towards digital learning, highlighting their positive emotional engagement with these tools. Similarly, item B10 ("I hope to use digital learning very well") had a high mean

score of 4.65, reflecting the teachers' aspirational attitude towards mastering digital learning applications.

Conversely, the items with the lowest mean scores were B4 ("I find it easy to use digital learning"), B5 ("I am confident in using digital learning"), and B7 ("I feel confident using digital learning"), with mean scores of 4.55, 4.58, and 4.56 respectively. Although these scores are slightly lower, they still indicate a generally positive attitude, suggesting areas where teachers might benefit from additional support or training to enhance their confidence and ease with digital learning tools.

Overall, the high mean score of 4.62 (SD=0.397) across all items reflects a very positive affective attitude towards digital learning among the Malay language teachers. These findings are in line with previous studies, such as those by Halili et al (2016); Ching (2021), which reported positive attitudes towards the adoption of digital tools in teaching. The alignment with these studies underscores the growing acceptance and enthusiasm for digital learning in educational environments.

The study by Muhamad et al (2021) also supports these findings, showing a positive attitude among teachers towards the use of multimedia in Quranic teaching. This consistency across various studies suggests that affective attitudes play a crucial role in the acceptance and successful implementation of digital learning tools in teaching practices.

The high affective attitude level demonstrated by the Malay language teachers indicates their readiness and willingness to integrate digital learning into their teaching practices. This positive disposition is essential for the successful adoption and effective utilization of digital tools in education. Therefore, it is important for educational institutions to continue providing the necessary resources, training, and support to sustain and further enhance this positive attitude towards digital learning.

Cognitive Attitude Level of Malay language Teachers Towards the Application of Digital Learning in Teaching Malay Language

Based on the analysis of the data, the cognitive attitude level of Malay language teachers towards the application of digital learning in teaching Malay language is notably high. The mean scores for each item related to cognitive attitude are summarized in Table 2.

Table 2

Mean and Standard Deviation for Cognitive Attitude Items

No	Item	Mean (M)	Standard Deviation (SD)
C1	I use digital learning to make students enjoy it.	4.69	0.465
C2	I use digital learning to keep students active in class.	4.72	0.451
C3	I understand that digital learning can attract students' interest.	4.61	0.531
C4	I use digital learning to make teaching easy for students to understand.	4.57	0.538
C5	I apply digital learning to create interactive teaching.	4.68	0.511
C6	I apply digital learning to diversify teaching methods.	4.62	0.509
C7	I apply digital learning so that teaching is not boring.	4.65	0.501
C8	I apply digital learning to document teaching materials.	4.54	0.560
C9	I use digital learning to deliver visual teaching.	4.61	0.531
C10	I understand that digital teaching is important for improving my skills.	4.58	0.537

The items with the highest mean scores were C2 ("I use digital learning to keep students active in class"), with a mean score of 4.72 and a standard deviation of 0.451, and C1 ("I use digital learning to make students enjoy it"), with a mean score of 4.69 and a standard deviation of 0.465. These high scores indicate that Malay language teachers strongly believe in the effectiveness of digital learning for engaging students and keeping them active in class. Similarly, item C5 ("I apply digital learning to create interactive teaching") had a high mean score of 4.68, indicating that Malay language teachers recognize the potential of digital learning to create interactive teaching environments.

Conversely, the items with the lowest mean scores were C8 ("I apply digital learning to document teaching materials"), with a mean score of 4.54 and a standard deviation of 0.560, and C4 ("I use digital learning to make teaching easy for students to understand"), with a mean score of 4.57 and a standard deviation of 0.538. While these scores are slightly lower, they still reflect a positive cognitive attitude, suggesting areas where further emphasis on the benefits of digital learning for documentation and simplifying complex concepts could be beneficial. Overall, the cognitive attitude level of Malay language teachers is high, with a mean score of 4.63 and a standard deviation of 0.41. This indicates a strong cognitive recognition among Malay language teachers of the benefits and importance of digital learning in enhancing their teaching practices and student engagement.

These findings are consistent with previous research, such as the studies by Abdul Rahman et al. (2020), which stated that the desire to use technology is a key factor driving its application. The researchers also noted that a high level of desire forms a positive cognitive attitude, aligning with the belief in digital learning as a major motivator for its use. Similarly, the study by Panjaitan et al (2020) found that digital animation media is more effective than digital storytelling media in building students' self-confidence, suggesting that the visual application of digital learning can enhance student engagement during teaching and learning. In

conclusion, the high cognitive attitude level demonstrated by the Malay language teachers' underscores their readiness and understanding of the value of digital learning in teaching the Malay language. It is crucial for educational institutions to continue supporting this positive attitude by providing ongoing training, resources, and opportunities for teachers to explore and effectively implement digital learning tools.

Research Implication

The research findings indicate that Malay language teachers exhibit high levels of both affective and cognitive attitudes towards the implementation of digital learning in Malay language teaching, with mean scores of $M=4.62$ ($SD=0.397$) for affective attitudes and $M=4.63$ ($SD=0.41$) for cognitive attitudes. These findings hold practical significance as they highlight the readiness and openness of Malay language teachers towards integrating digital technologies into their teaching practices. Given the increasing emphasis on digitalization in education, understanding teachers' attitudes towards digital learning is crucial for informing professional development initiatives and educational policies.

The implications of these findings extend to various stakeholders in the education sector, including educators, policymakers, educational institutions, and teacher training programs. The findings contribute to the Technology Acceptance Model by demonstrating the relevance of attitudes and perceptions of users in the adoption of technology, particularly in the context of language teaching. This underscores the importance of considering teachers' attitudes towards digital learning when designing technology integration initiatives.

For Malay language teachers, the findings suggest the need for targeted professional development programs focused on enhancing digital literacy and pedagogical skills. Teachers can benefit from training workshops and resources aimed at effectively integrating digital tools into Malay language instruction to enhance student engagement and learning outcomes. Policymakers should consider these findings when formulating educational policies and initiatives related to digital learning in Malay language education. Emphasis should be placed on providing support and resources to facilitate the effective integration of digital technologies into teaching practices. In summary, the implications of this study empower Malay language teachers to embrace digital technologies as valuable resources for enhancing teaching and learning experiences. By investing in digital literacy, pedagogical innovation, collaboration, and reflective practice, teachers can effectively integrate digital tools into their teaching practices and promote student engagement and achievement in Malay language education.

Recommendations for Action

Based on these findings, it is recommended that Malay language teachers' training programs incorporate modules on digital pedagogy and technology integration into their curricula. Additionally, educational institutions should provide ongoing support and resources to empower teachers to embrace digital learning in their classrooms. Future research could explore longitudinal studies to examine the sustainability of teachers' attitudes towards digital learning over time. Additionally, studies could investigate the impact of different professional development approaches on teachers' digital pedagogical practices and student outcomes. Future research should consider conducting longitudinal studies to assess the sustainability of teachers' attitudes towards digital learning over time. By tracking changes in

attitudes and practices over an extended period, researchers can gain insights into the long-term impact of digital learning initiatives on teaching practices and student outcomes. Further studies could explore the effectiveness of different professional development approaches in enhancing teachers' digital pedagogical practices and improving student outcomes. This may involve comparing the outcomes of various training methods, such as workshops, online courses, peer mentoring, or collaborative learning communities, to identify best practices for supporting teachers in integrating technology into their teaching.

Conclusion

This study has shed light on the attitudes of Malay language teachers towards digital learning, with a specific focus on teaching the Malay language. Through the use of a quantitative approach and descriptive analysis, data from 97 randomly selected Malay language teachers were collected via a 5-point Likert scale questionnaire. The findings of the study reveal that Malay language teachers exhibit high levels of both affective and cognitive attitudes towards digital learning. Specifically, the mean level of affective attitude was recorded at 4.73 (SD=0.397), indicating a strong positive disposition towards digital learning methods. Similarly, the mean level of cognitive attitude was 4.63 (SD=0.41), further emphasizing the enthusiastic embrace of digital learning approaches among Malay language teachers. In conclusion, addressing the implications identified in this research can contribute to fostering a supportive environment that promotes the effective integration of digital technologies in teaching and learning practices within the context of Malay language education. By implementing these recommendations, stakeholders can work towards enhancing the quality of education and preparing students for success in a digital world.

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