

# Teachers' Readiness and Influencing Factors in the Integration of Artificial Intelligence (AI) in English Language Teaching: A Systematic Literature Review

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## ABSTRACT

This systematic review, conducted according to PRISMA guidelines, investigated teachers' readiness and influencing factors in integration of Artificial Intelligence (AI) in English Language Teaching (ELT). The study analyzed 20 research articles published between 2021 and 2025, emphasizing on the utilization of Artificial Intelligence (AI) in education. Key findings revealed that AI offers significant benefits, including adapt lessons to suit every learner's preferred way of learning and prepare tasks for the students. Furthermore, AI fosters digital literacy and creativity of the teachers to improve engagement, learning outcomes, and classroom efficiency. While AI demonstrates the ability to improve learner engagement and motivation, the study also acknowledged the factors related with implementing AI technology in educational settings. The review also underscores varying levels of awareness and confidence among teachers in using AI tools effectively within ELT contexts. This analysis offers meaningful information for educators aiming to effectively integrate AI into their teaching practices, ultimately improving student learning outcomes.

**Keywords:** systematic literature review, Artificial Intelligence (AI), English, Language Teaching

## INTRODUCTION

The education system is constantly undergoing changes to keep pace with the times or even stay one step ahead. In this regard, digitalization is not something new in the field of education. Changes and digitalization in education often require educators to continuously update themselves so they can have a direct impact on students' learning. In that case, educators play a key role in implementing digital-based teaching to produce competitive and capable students.

The title "Teachers' Readiness Level for the Integration of Artificial Intelligence (AI) in English Language Teaching: A Systematic Literature Review" was chosen to emphasize the essential role of teachers' readiness in the successful integration of AI technology in English language education. Many studies have highlighted the need to bridge the gap between teacher readiness and actual classroom implementation of AI. By concentrating on teachers' readiness, this study aims to investigate their knowledge, skills and concerns aligned with the use of AI in English teaching. This focus will provide valuable insights into the factors that influence teacher adoption of AI and will inform the development of effective ways to support AI integration in English teaching.

The field of technology has now reached an advanced stage through the upgrade of Artificial Intelligence (AI). The use of AI is becoming increasingly important in stimulating students' thinking and learning. Various generative AI tools that can be used as teaching materials have been found to benefit educators by making the teaching process easier and more effective. Educators hold an important role in adopting the use of AI, which can support their teaching practices. In this context, English language teaching has also become more accessible with the advancement of AI. AI applications specifically designed for English offer educators the opportunity to transform their teaching methods while simultaneously improving students' English language skills.

This need is in line with the Digital Education Policy (Ministry of Education, 2023), which outlines four objectives of digital education supported by six core pillars, 18 strategies, and 41 initiatives. Core Pillar 2 emphasizes the Ministry of Education's goal to produce educators who are digitally knowledgeable and skilled in delivering teaching and learning (PdP) that aligns with current and future needs for the period of 2023–2025. According to the Malaysia Education Blueprint (2013–2025), Shift 7 also highlights the benefits of utilizing Information and Communication Technology (ICT) to enhance the quality of teaching and learning in Malaysia.

## Research Objectives

The objectives of this research were:

1. To identify teachers' readiness in terms of knowledge and skills for the integration of Artificial Intelligence (AI) in English language teaching.
2. To identifying the factors that influence teachers in integrating artificial intelligence (AI) into English language teaching.

## Research Questions

The research questions of this study were:

1. What is the level of teachers' readiness in terms of knowledge and skills for integrating Artificial Intelligence (AI) in English language teaching?
2. What are the key factors that influence teachers' decisions to integrate AI into English language teaching?

## BACKGROUND OF THE STUDY

### Artificial Intelligence (AI)

Artificial Intelligence (AI) is a form of technology in the shape of computer systems or machines based on algorithms that are capable of processing and analyzing complex data (Azwani Awang, 2023). AI can also be defined as a field within computer science in which computer systems are able to perform tasks like humans or even better than humans (Jarot Dian Susatyono & M.Kom, 2021). Regarding to this study, artificial intelligence refers to AI embedded within computer systems. In the context of education, AI is used to customize learning style, assess student achievement, and assist teachers in planning instruction more effectively.

### Integration of Artificial Intelligence (AI) in Teaching

Artificial Intelligence (AI) enables learning process for individuals by adapting content and teaching methods to the individual needs of students. Through big data analysis, AI can identify students' learning patterns and tailor instructional materials to enhance learning effectiveness (Al-Zahrani & Alasmari, 2024; Laupichler et al., 2022). In English language teaching, AI is used to customize content based on students' proficiency levels, learning styles, and areas needing improvement. AI-based assessment tools provide immediate feedback to learners, helping them identify weaknesses and improve their language skills (Lambert et al., 2023).

AI has been broadly used in English language teaching to enhance student involvement and instructional effectiveness. Tools such as AI chatbots offer interactive conversational practice, helping students improve fluency and confidence in English through simulated dialogue (Wang et al., 2021). AI-powered speech recognition systems analyze students' pronunciation and provide instant feedback to improve speaking skills. Additionally, AI is used to assess students' writing abilities by identifying grammatical, syntactical, and vocabulary errors, and offering suggestions for improving writing structure and style (Yin et al., 2021). AI-based language learning applications like Duolingo use algorithms to create gamified learning experiences, personalize content based on learners' needs, and offer progress tracking (Lambert et al., 2023).

Studies show that both teachers and students have positive perceptions of AI usage in English language teaching. Teachers appreciate AI's ability to provide personalized learning and immediate feedback, which helps improve students' language skills (Normadiah & Rafizah, 2023). However, concerns remain about technological

readiness and the need for training and support in using AI solutions effectively. Students also report that the use of AI in English teaching increases their engagement, motivation, and learning outcomes. Nevertheless, challenges such as technical issues and the need for human interaction have also been identified (Chen et al., 2020).

Although AI offers numerous benefits in education, several difficulties and ethical concerns require attention. Issues such as unequal access to AI-based educational resources, concerns over data privacy, and the ethical implications of using AI in educational settings need careful attention (Williamson & Eynon, 2020). It is essential to make sure that the use of AI in education does not widen the digital divide and that students' data is adequately protected.

The integration of AI in English language teaching requires teachers to possess knowledge and skills in this technology. Teachers' readiness to adopt AI in their teaching depends on professional training, infrastructural support, and attitudes toward technology (Robert et al., 2024). Teachers need to be prepared to understand how to use AI tools successfully and ethically and to adapt their teaching to optimize the use of AI in enhancing student learning.

## METHODOLOGY

This structured literature review utilized the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 checklist as a framework. Guided by the 27 item checklist and a four-stage flowchart, the selected articles were examined and assessed to address two research questions. The PRISMA process involved four distinct stages: identification, screening, eligibility, and inclusion.

### Phase 1: Identification Phase

In this research, five predetermined criteria were considered for selecting and identifying relevant articles. To begin with, the databases utilized to locate appropriate studies for inclusion in this systematic literature review were ScienceDirect, ERIC., Malaysian Journal Of Social Sciences And Humanities (MJSSM), Google Scholar, SCOPUS and PubMed. These six databases were available for the researchers and include articles related to the field of education, social sciences, humanities and technologies. Secondly, these articles must be published between the year 2021 to 2025. The fourth criterion for selecting documents in this study was limited to research articles, while the fifth criterion required that the articles be fully accessible with open access. Total 1050 articles were identify based on the titles. Table 1 presents the six criteria that were considered when selecting the articles.

Criteria	Inclusion	Exclusion
Database		Other databases
Publication year	2025	Before 2025
Language	English and Malay	Other than English and Malay
Document type	Research articles	Books, book chapters, literature review papers, seminar papers
Access to full text	Open access	Limited or no access
Keywords that used in articles	Systematic literature review, Artificial Intelligence (AI), English, Language Teaching	Other keyword

Table 1: The inclusion and exclusion criteria in choosing the articles.

In addition, several search strings and keywords were used to identify articles. Each search string was applied across three databases to find articles regarding teachers' readiness and influencing factors in the integration of artificial intelligence (AI) in English language teaching.

Search Strings				
Teachers' Readiness	AND	Artificial Intelligence		
Factors	AND	Artificial Intelligence	AND	Teaching
Implementation	AND	Artificial Intelligence	AND	Teaching

Table 2: The search strings applied across three databases

Every article found that met the inclusion and exclusion criteria was selected and added to the list according to the criteria and search strings in Table 1 and 2, while the others were excluded and removed from consideration.

### Phase II: Screening Phase

Phase II title screening was done to make sure the keywords matched, and then a more thorough abstract assessment was carried out using predetermined inclusion and exclusion criteria. Through the excluded of duplicate articles and irrelevant content from all three databases, the list became more targeted. Twenty of the 80 articles were removed in screening phase where that didn't fulfill the requirements for keywords and abstracts were eliminated during the screening stage.

### Phase III: Eligibility Phase

The remaining papers' abstracts were examined in greater detail following the screening stage. A predetermined set of inclusion and exclusion criteria was used to thoroughly evaluate each abstract. To be considered relevant, an article must fulfill certain requirements known as inclusion criteria. A requirement for inclusion can be, for instance, "studies must investigate primary school teachers' perceptions of AI in teaching." In contrast, exclusion criteria specify the qualities that inherently invalidate an item. This could contain research that was published prior to a specific date, examined secondary schools or examined various technologies. This stage was essential to ensuring that every article found addressed the research questions. 50 items were chosen for this phase out of 250.

### Phase IV: Exclusion Phase

A thorough selection procedure was used to find the most relevant articles for study after the initial search. Predetermined standards were used to analyze the articles in order to make sure they had a clear relationship to the study issue. These criteria included, but were not limited to, publication type (excluding books, book chapters, literature reviews, and seminar papers), accessibility of full text, and publication date between 2021 and 2025. Articles that did not fulfill these criteria were removed from further analysis.

Twenty papers were chosen after the four stages of screening. Research studies using mixed-method, qualitative, quantitative, and case study methodologies were included in these articles. As shown in Table 3, five papers employed qualitative methods, eight used quantitative methods, six used mixed-method approaches, and one was designated as a case study.

Research methodology	Quantity
Qualitative	4
Quantitative	9
Mixed	3
Case study	4

Table 3 Table presents the number of articles categorized by the research methods used.

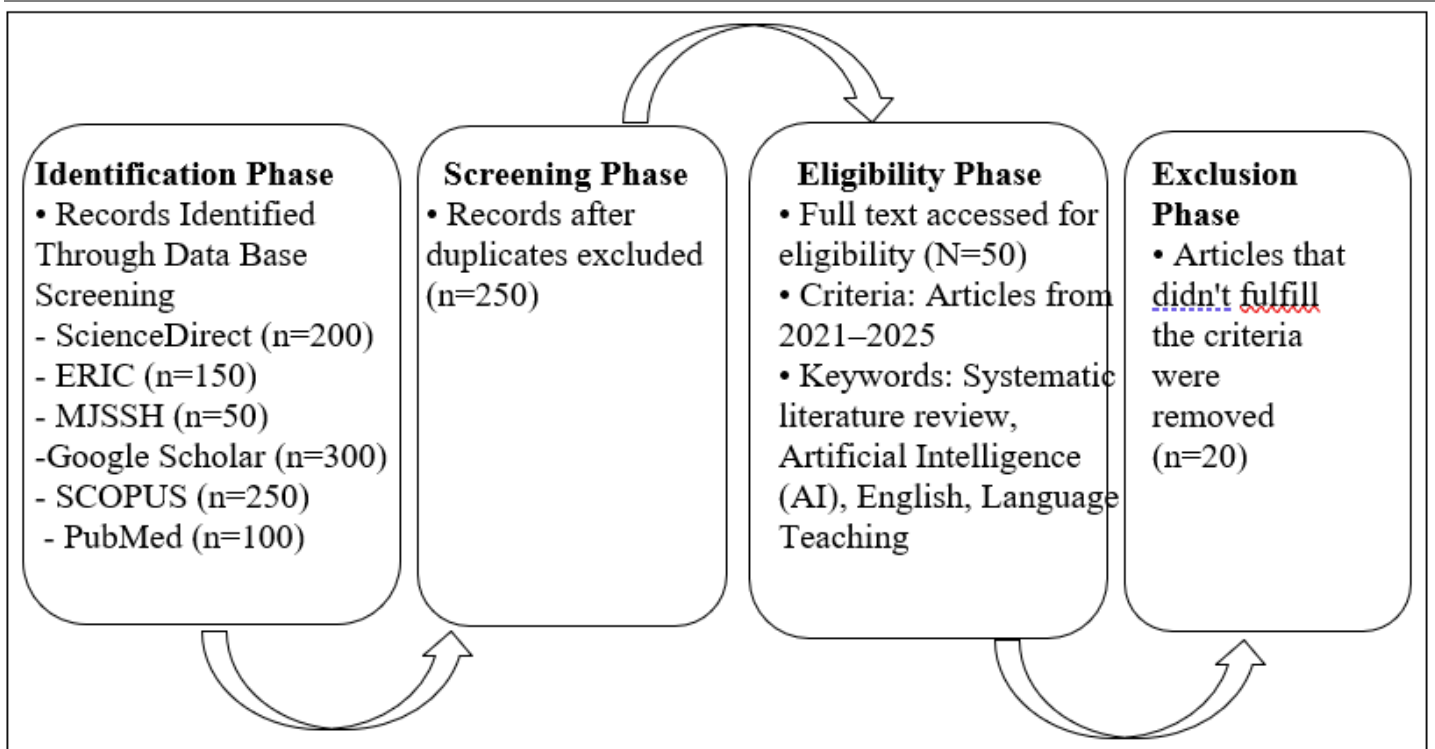


Figure 1: PRISMA Flowchart. The PRISMA diagram presents the systematic review process

## FINDINGS AND DISCUSSIONS

The researchers gathered, examined and tallied a total of 20 papers for their study. It is noteworthy that all of the articles were sourced from 2021–2025. By bringing it into line with current advancements and technological advancements, this selection technique aimed to guarantee the current study's relevancy. It also provided the researcher with guidance on how to properly answer the suggested study questions. Table 4 lists each article's research methodology type, the country in which the data was gathered, the publications' findings, the research gaps that were found, and the conclusions. All of the findings are methodically coded.

No	Titles and Authors	Country	Research Methods	Findings	Research Gap	Conclusion
1.	Artificial Intelligence and Data Literacy in Rural Schools' Teaching Practices: Knowledge, Use, and Challenges.  Marta López Costa (2025)	Spain	Quantitative  <b>Theoretical Frameworks</b>  -	- More than 50% of teachers reported having moderate knowledge of AI.  - AI use in teaching is limited.	Distinct challenges and potential benefits of implementing AI in rural education settings.	- Improving teacher training in both AI tools and data management is essential.  - Schools and policymakers support rural teachers in use of AI to close education gap between urban and rural areas.
2.	Kesediaan Guru Bahasa Melayu dalam Mengimplementasikan Kecerdasan Buatan dalam Pengajaran dan	Malaysia	Quantitative  <b>Theoretical Frameworks</b>	- The teacher readiness level is high.  - The most influential factor is	Focusing on an in-depth analysis based on teacher profiles (novice vs experienced) for more	Continuous training, institutional support and a systematic approach are necessary to ensure

	Pembelajaran. Nur Udhwaashikin Mohd Rani, Nurin Hanisah Roslan & Nur Syafiqah Abdul Wahid (2025)		-	knowledge and skills.	targeted interventions.	that the use of AI can be optimally used.  Teachers must be mentally, emotionally and technically prepared to successfully implement AI.
3.	Primary School Teachers' Readiness on the Use of AI Generated Image To Teach Literature In Component.  Muhammad Farhan Mohd. Yazid & Azlina Abdul Aziz (2025)	Malaysia	Mixed Method  <b>Theoretical Frameworks</b>  Technology Acceptance Model (TAM)  Diffusion of Innovation Theory  Unified Theory of Acceptance and Use of Technology (UTAUT)	Over 80% primary school teachers show a high level of readiness to adopt AI-generated images in teaching, especially for literature.  Readiness is significantly shaped by usability, perceived benefits, social encouragement and institutional support.	How to break down the barriers for the adoption of AI and how to integrate AI tools with pedagogical practices developed a priori.	Teachers' performance and effort expectancy, social influence and facilitating conditions significantly affecting the willingness to adopt AI .
4.	Exploring In-service EFL Teachers' Readiness for the Generative AI Age. Nihal Ozdemir & Enisa Mede (2024)	Turkey	Qualitative  <b>Theoretical Frameworks</b>  -	Most teachers see it as enjoyable and effective.	- In-depth evaluations of specific AIEd tools.	Face challenges related to training, ethical use, and infrastructure.
5.	Teachers' readiness and intention to teach artificial intelligence in schools. Musa Adekunle Ayanwale et al. (2022)	Nigeria	Quantitative  <b>Theoretical Frameworks</b>  Theory of Planned Behavior (TPB)  Technology Acceptance Model (TAM)  Technology Readiness	Relevance of AI and confidence in teaching AI are significant predictors of readiness.  Self-belief in teaching AI, relevance of AI, attitude toward AI and perceived usefulness are significant predictors of behavioural intention to teach AI.	Intervention studies involving formal AI training or professional development programs.	Anxiety about AI was not a major barrier among teachers.

			Index (TRI 2.0)			
6.	A Self-Efficacy Theory-based Study on the Teachers' Readiness to Teach Artificial Intelligence in Public Schools in Sri Lanka. Chathura Rajapakse, Wathsala Ariyaratna & Shanmugalingam Selvakan (2024)	Sri Lanka	Quantitative  <b>Theoretical Frameworks</b>  Self-Efficacy Theory	- Teachers' have low confidence in their capability to teach AI.  - Their self-efficacy was primarily affected by their emotional and physical conditions.  - Mastery experiences played a smaller role in shaping their confidence in teaching AI.	- Analysing how variables like age, gender, geographic region, or educational history influence teachers' confidence in teaching AI.	- Insufficient preparedness to effectively instruct AI in educational settings.
7.	The Readiness to Use AI in Teaching Science: Science Teachers' Perspective.  Sameera Alshorman(2024)	Jordan	Quantitative  <b>Theoretical Frameworks</b>  Technology Acceptance Model (TAM)	Male teachers shows higher readiness compared to females.  Higher qualifications correlated with higher AI readiness.	- Actual implementation of AI in classrooms  - Utilising various sampling methods that include teachers from different geographical areas.	- Jordanian science teachers are generally open to integrating AI in science education, but readiness is uneven.  - Professional development is needed, especially for female teachers and those with lower academic qualifications.
8.	"I'M NOT READY for THIS METAMORPHOSIS": An Ecological Approach to Iranian and Italian EFL Teachers' Readiness for Artificial Intelligence-Mediated Instruction.  Farhad Ghasvand, Maryam Kogani & Ali Alipoor (2024)	Iran and Italy	Qualitative  <b>Theoretical Frameworks</b>  Ecological Systems Theory	100% Italian teachers expressed readiness for AI use.  Readiness linked to prior IT experience, curiosity and technological literacy.  90% Iranian teachers were not ready for AI integration.	- Inadequate attention to teacher attitudes and system-level constraints in diverse contexts.	- Cultural, economic and infrastructural disparities shape divergent AI integration levels between countries.
9.	Korean in-Service Teachers' Perceptions of Implementing Artificial Intelligence (AI)	South Korea	Mixed-methods  <b>Theoretical Frameworks</b>	100% of participants intend to use AI-based teaching tools.  AI consider useful in individualized	-Professional development (PD) programs for AI.  - Methods for successfully	- AI keeps transforming the field of education.  - It is essential to offer teachers the guidance and training needed to

	<p>Education for Teaching in Schools and Their AI Teacher Training Programs.</p> <p>Yong-Jik Lee, Robert O. Davis, &amp; Jeeheon Ryu (2024)</p>		<p>UNESCO ICT Competency Framework</p>	<p>learning, lesson planning and performance assessment and administrative tasks.</p> <p>AI Training Programs increased AI knowledge and skills, supportive learning communities and applicability in classrooms.</p>	<p>designing teacher training programs focused on AI education.</p>	<p>utilize AI technologies efficiently.</p>
10.	<p>Teacher's Readiness Level for Using Artificial Intelligence (AI) Based on Teaching Experience.</p> <p>Rajeswary A/P Nerasaman &amp; Mohd Jasmy Bin Abd Rahman (2025)</p>	Malaysia	<p>Quantitative</p> <p><b>Theoretical Frameworks</b></p> <p>-</p>	<p>Teachers showed a moderate readiness to integrate AI.</p> <p>There is no statistically significant relationship between teaching experience and readiness level.</p>	<p>How teaching experience affects AI readiness.</p>	<p>Teachers are generally open to AI integration in teaching regardless of experience.</p> <p>Lack sufficient skills to fully implement AI.</p>
11.	<p>Teachers and Learners' Perceptions about Implementation of AI Tools in Elementary Mathematics Classes.</p> <p>Xuejing Song, Joonkong Mak &amp; Haowei Chen (2025)</p>	Malaysia	<p>Mixed-method</p> <p><b>Theoretical Frameworks</b></p> <p>Constructivist learning theory and TPACK</p>	<p>Experimental group using AI tools showed a statistically significant improvement in test scores.</p> <p>Teacher have positive perception that AI tools simplify teaching and improve learning engagement.</p>	<p>Long-term effects of AI integration on student outcomes.</p> <p>Teachers' readiness for AI use in elementary mathematics.</p>	<p>Ongoing training, technical support, and ethical frameworks are essential for sustainable AI integration in education.</p>
12.	<p>A Study on Teachers' Willingness to Use Generative AI Technology and Its Influencing Factors: Based on an Integrated Model.</p> <p>Haili Lu et al. (2024)</p>	China	<p>Quantitative</p> <p><b>Theoretical Frameworks</b></p> <p>Technology Acceptance Model (TAM)</p>	<p>Teachers' willingness to use AIGC is affected by their perceived usefulness, ease of use, behavioral attitude, and perceived behavioral control.</p> <p>Perceived cost and subjective norms do not significantly influence teachers' willingness.</p> <p>Primary and secondary school</p>	<p>Integration between technical perceptions and social factors.</p>	<p>Teachers must be supported not just technically but psychologically and socially to facilitate AI integration.</p>

				teachers have lower usage intentions due to structured curricular and limited technological flexibility.		
13.	AI Shaping the Future of Education: Science and Math Teachers' Satisfaction Level and Motivating Factors towards Integrating Artificial Intelligence in Teaching and Learning. Ali Khaled Bawaneh et al. (2025)	Jordan and Bahrain	Quantitative  <b>Theoretical Frameworks</b>  -	High satisfaction level among science and math teachers with AI use in teaching.  Medium satisfaction level with motivating factors such as institutional incentives and support.	Insights into practical obstacles faced by teachers in using AI tools.	Educational stakeholders must provide infrastructure and training and build educators' capacity to effectively use AI.
14.	Exploring the factors affecting the adoption AI techniques in higher education: insights from teachers' perspectives on ChatGPT. Habiba Al-Mughairi and Preeti Bhaskar (2023)	Oman	Qualitative  <b>Theoretical Frameworks</b>  Technology Acceptance Model (TAM) & Unified Theory of Acceptance and Use of Technology (UTAUT)	The exploration of advanced educational technologies, the personalization of teaching and learning processes, time efficiency, and continuous professional development are significant factors that impact the adoption of ChatGPT.	Research on views and experiences of educators from diverse cultural backgrounds and various educational systems about adoption of ChatGPT.	The use of ChatGPT by teachers is influenced by various encouraging factors as well as limiting factors.
15.	Artificial Intelligence (AI) In Education: Using AI Tools for Teaching and Learning Process.  Tira Nur Fitria (2021)	Indonesia	Qualitative  <b>Theoretical Frameworks</b>  -	Teaching and learning processes utilize various educational tools and platforms, including Virtual Mentors, Voice Assistants, Smart Content, Presentation Translators, Global Courses, Personalized Learning systems, and Educational Games..	Analysis of AI tools used in education and their practical impact on both students and educators.	In order to properly use AI in the classroom, educators should adjust and improve their skills.
16.	Evaluating Teachers' Perspectives on Education-Based Assessment Strategies with Artificial	Malaysia	Case study  <b>Theoretical Frameworks</b>	- Teachers exhibit readiness that is neutral to slightly positive.	The practical experiences of using AI among teachers	Teachers' self-assurance, institutional assistance and personalized instruction for teachers are the

	Intelligence (AI) Janitha Kularajasingam et.al (2025)		-	- Training and institutional assistance are not always consistent.		factors that determine use of AI.
17.	Bridging The Gap: Language Teacher Understanding and Responsible AI Implementation in Schools. A Case Study of English Language Educators in Kubu Raya. Tetty Novitasari Simbolon (2024)	Indonesia	Case Study  <b>Theoretical Frameworks</b>  TPACK and  TAM	Lack of training and confidence among educators.  Some teachers are enthusiastic and receptive to new ideas, while others are doubtful.	Teachers' critical involvement with educational integration, ethics, and bias in AI.	Teachers must be supported through training to effectively and safely integrate AI in teaching.
18.	Generative AI and Teachers - For Us or Against Us? A Case Study. Jenny Pettersson et al. (2024)	Sweden	Quantitative  <b>Theoretical Frameworks</b>  -	The most popular GenAI tool used is ChatGPT.  85% do not believe AI will replace teachers.	Ways of GenAI influences teachers' roles, concerns, and encouragement practices.	Most teachers are open to adopting GenAI in their practice.
19.	Integration of Artificial Intelligence on Teaching the Course of Didactic Methodology: A Case Study. Eleni Mavropoulou et al. (2023)	Greece	Case Study  <b>Theoretical Frameworks</b>  -	AI tools work well in creating lesson plan, support time efficient and create educational resources.	Lack of empirical insights on how teachers interact with AI to create authentic, context-specific material.	In order to improve AI outputs, teacher supervision and experience are essential.
20.	AI utilization in primary mathematics education: a case study from a southwestern Chinese city. Mao Li and Elham Manzari (2025)	China	Case Study  <b>Theoretical Frameworks</b>  TPACK and  TAM	Teachers' attitudes toward AI, educational policy, infrastructure and parental involvement influence the use of AI.	Relationship between the larger systemic environment and teachers' preparedness.	Professional development, supportive policies and systemic alignment are needed for successful AI integration in primary mathematics education.

Artificial intelligence (AI) has developed as a powerful tool in primary education, offering immersive and realistic experiences that engage the educators and learners in ways where traditional methods cannot do. Teachers can improve their teaching methods and student engagement through opportunities for intelligent feedback, individualized learning, and administrative work automation with the use of AI. This technology-driven helps the teacher towards more effective lesson delivery and supporting data-informed decision-making. However, However, teachers' readiness including their technological proficiency, pedagogical knowledge, and institutional support is essential to the successful integration of AI in education.

It is generally acknowledged that teachers are becoming more knowledgeable, more adopt and more skilled in using artificial intelligence (AI). According to previous research, teacher shows highly readiness to implement artificial intelligence (AI) in teaching process. According to Musa Adekunle Ayanwale et al. (2022) relevance of AI and confidence in teaching AI are significant predictors of readiness among the teachers. This study also

highlights teachers' attitude toward AI encompasses their level of comfort using AI tools, belief in AI's ability to support their teaching objectives and their willingness to adopt new technologies in the classroom. Moreover, perceived usefulness also predictors of behavioural intention to use AI. Teachers' more likely to adopt and use it in teaching when they perceive AI as beneficial in helping with lesson planning, improving student learning outcomes and saving time.

Integrating artificial intelligence (AI) as a alternative to conventional teaching methods than as a complete substitute helps to strike a balance between teacher-centered and student-centered approaches. This strategy makes sure that fundamental learning goals are fulfilled while utilizing AI's creative potential to improve learning outcomes and experiences. This statement is supported by Xuejing Song, Joonkong Mak & Haowei Chen (2025) that the implementation of AI tools showed a statistically significant improvement in test scores and the teachers' have positive perception that AI tools simplify teaching and improve learning engagement. This shows that implementation of AI essentially helps enhance learning outcomes of the students and support teaching process.

Based on the reviewed articles, most the surveys were conducted in primary and secondary schools but only a limited number of surveys have been conducted in Malaysia to examine the implementation of Artificial Intelligence (AI) in education. According to Nur Udhwaashikin Mohd Rani, Nurin Hanisah Roslan & Nur Syafiqah Abdul Wahid (2025) the teacher readiness level is high and the most influential factor is knowledge and skills. This study also emphasizes continuous training, institutional support and a systematic strategies play a vital role to ensure that the use of AI can be optimally used by the teachers'. Despite its benefits, challenges persist, particularly regarding infrastructure, technical support, curriculum adaptation and teacher's anxiety of AI. Professional training and support from the schools are very important and could be motivating factors to the teacher to apply AI efficiently in teaching.

Moreover, based on the reviewed articles we can conclude that there are many factors that influence the teachers' to implement AI in teaching. Knowledge, skills, social encouragement, structured curricular and technological flexibility are some of the factors that influence the implementation of AI in teaching. In addition, individual characteristics including experience, gender and attitudes towards technology play significant roles in shaping teachers' readiness levels towards implementation of AI. So that, it is necessary to improve teacher training in AI, with support from schools and policymakers, and to provide facilitating conditions to make sure that teachers can use AI confidently. This definitely will give a chance to the teachers to use AI not only in language subjects but also in other subjects.

In conclusion, the findings underscore AI's significant role in modern education, offering a pathway to more effective and engaging learning and teaching environments. Undeniably, teachers' have a impact in ensuring its meaningful integration into classrooms. As educators continue to explore and integrate AI into classrooms, ongoing professional development and support will be critical to maximizing its potential. Without proper support and structured professional development, many educators may struggle to adopt AI tools effectively. It is essential to make sure teachers' feel ready, capable and assured to use AI.

## CONCLUSION

The systematic literature review on the integration of Artificial Intelligence (AI) in English Language Teaching (ELT) highlights teachers' readiness and the various factors that influence their implementation of AI in teaching practices. AI technologies demonstrate strong potential in enhancing student engagement, accelerating language acquisition, and promoting independent learning through personalized instruction and automated feedback. However, the successful integration of AI into language education is highly dependent on teachers' readiness, which is shaped by multiple interconnected factors.

These factors include teachers' levels of digital literacy, their attitudes toward AI, access to continuous professional development, and the degree of institutional support provided by schools and educational authorities. Teachers with higher technological competence and positive perceptions of AI are more likely to integrate AI tools effectively into their lessons. In contrast, limited training opportunities, insufficient

understanding of AI applications, and inadequate technological infrastructure serve as major barriers that hinder teachers from fully utilizing AI technologies in classroom instruction.

Furthermore, these challenges cannot be addressed by teachers alone and require collaborative efforts among educators, policymakers, and technology experts. Such collaboration is necessary to develop sustainable frameworks that ensure responsible and effective AI integration, including the provision of clear policies, structured training programs, and appropriate technological resources. Continuous investment in research and development is also essential to evaluate the long-term impact of AI on teaching quality and learning outcomes.

By overcoming these barriers and maximizing the benefits of AI technology, primary schools can establish innovative and inclusive learning environments that prepare both teachers and students for a technologically advanced future. In this way, AI can function not merely as a supporting tool, but as a strategic educational resource that enhances instructional effectiveness while preserving the central role of teachers in the teaching and learning process.

## RECOMMENDATIONS

The results of the systematic literature analysis have led to some important recommendations aimed at improving teachers' readiness for implementing artificial intelligence (AI) into English language teaching (ELT). Firstly, extensive and ongoing professional development is crucial. When utilizing AI tools in the classroom, training should also cover ethical issues and classroom management techniques. Secondly, substantial institutional and policy-level support is required, which includes financial commitment, the establishment of explicit rules, and alignment with curriculum objectives. Furthermore, in order to regularly evaluate the effect of artificial intelligence on teachers progress, research and development initiatives must continue.

There are several important directions for future research. First, studies should examine student learning outcomes in English subjects before, during and after the implementation of AI-based interventions in order to determine their actual impact on language achievement. In addition, further research should explore how teachers use specific AI tools in English language teaching and learning including the pedagogical strategies adopted and the challenges encountered. Finally, future studies should investigate students attitudes toward the adoption of AI in English language learning to better understand their acceptance, motivation and engagement when learning with AI-supported technologies.

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