

Mapping the Human-AI Interface in Language Teaching: EFL Teachers' Perceptions and Professional Implications

تصورات معلمي اللغة الإنجليزية كلغة أجنبية حول الذكاء الاصطناعي وانعكاساته المهنية في تعليم اللغات

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الملخص:

تتناول هذه الدراسة الاستطلاعية الأدبيات الناشئة حول مواقف معلمي اللغة الإنجليزية بوصفها لغة أجنبية تجاه انخراط ودمج الذكاء الاصطناعي في العملية التعليمية. واستناداً إلى إطار عمل Arksey و O'Malley لعمل هذا النوع من الدراسات، جرى تحديد الدراسات المنشورة بين عامي 2020 و 2025، ومن ثم فرزها وتحليلها، لينتج عن ذلك 44 دراسة محكمة متطابقة مع معايير تضمين الدراسات السابقة في هذه المراجعة الاستطلاعية. كشفت النتائج عن وجود نمط مزدوج: فمن ناحية، يُنظر إلى الذكاء الاصطناعي بوصفه أداة واعدة لتحسين جودة التدريس، وأتمتة المهام الإدارية، وتعزيز تفاعل المتعلمين. ومن ناحية أخرى، يعبر المعلمون عن هواجس ترتبط بالتزاهة المهنية، واستقرار الوظائف، وإشكاليات أخلاقية تتصل باستخدام هذه التكنولوجيا. وتؤكد الأدلة أن المعلمين ليسوا مجرد متلقين سلبيين للتطورات التقنية، بل يشاركون بفاعلية في التكيف معها عبر برامج التطوير المهني، والتعاون مع الزملاء، والاستخدام الاستراتيجي للذكاء الاصطناعي بما يضمن استمرارية دورهم التربوي. ترتبط المواقف الإيجابية عادةً بتوافر الدعم المؤسسي، وإدراك المزايا المتحققة، واتساق الذكاء الاصطناعي مع الفلسفات التعليمية السائدة، في حين ترتبط المواقف السلبية بالتحديات والمخاوف التي يثيرها الذكاء الاصطناعي. ومن خلال تسليط الضوء على هذه الاتجاهات والفجوات البحثية، تسهم هذه المراجعة في إثراء الفهم العميق للعلاقة المتطورة بين معلمي اللغة الإنجليزية والذكاء الاصطناعي، مؤكدة في الوقت نفسه الحاجة الماسة إلى سياسات تعليمية ومبادرات تدريبية تمكن المعلمين من توجيه مسار دمج الذكاء الاصطناعي على نحو يحافظ على هويتهم المهنية ويعزز نراحتهم التربوية.

الكلمات المفتاحية: الذكاء الاصطناعي، تعليم اللغة الإنجليزية بوصفها لغة أجنبية، مواقف المعلمين، الهوية المهنية

Abstract:

This scoping review maps the emerging literature on English as a Foreign Language (EFL) teachers' attitudes toward artificial intelligence (AI) integration in education. Guided by Arksey and O'Malley's framework, studies published between 2020 and 2025 were identified, screened, and synthesized, resulting in 44 peer-reviewed articles. The findings reveal a dual pattern: teachers generally welcome AI for its potential to enhance instruction, automate administrative tasks, and increase learner engagement, yet they also voice concerns over professional integrity, job security, and ethical challenges. Evidence suggests that teachers are not passive recipients of technological change but actively adapt through professional development, peer collaboration, and strategic use of AI to sustain pedagogical authority. Positive perceptions are linked to institutional support, recognition of benefits, and alignment with existing teaching philosophies, while negative perceptions often arise from unresolved challenges and risks. By surfacing these dynamics and gaps, the review provides a nuanced understanding of the evolving relationship between EFL educators and AI, highlighting the need for policies and training that empower teachers to shape integration in ways that safeguard professional identity and pedagogical integrity.

Keywords: Artificial Intelligence (AI), English as a Foreign Language (EFL), Teacher Attitudes, Professional Identity

INTRODUCTION

The integration of Artificial Intelligence (AI) into education is profoundly reshaping English Language Teaching (ELT), influencing instructional practices, classroom dynamics, and teachers' roles and professional identities. As AI-powered tools such as automated writing evaluators, adaptive learning platforms, and conversational agents become increasingly prevalent, ELT teachers find themselves navigating complex and sometimes contradictory responses. These technologies are being adopted to streamline lesson planning, content development, feedback provision, and assessment. At the same time, they raise critical questions about the sustainability of teachers' traditional responsibilities and authority. This overarching pattern of benefits and challenges is consistently reported across recent studies¹

Building on this duality, contemporary ELT discussions further highlight how teachers negotiate the expanding presence of AI in the classroom. Many educators view AI tools as practical extensions of their instructional work², while others express concern about the implications for professional autonomy and instructional authenticity, themes also noted in these studies. At the same time, research indicates that teachers continue to perform essential functions, such as applying assessment criteria, fostering critical thinking, and providing ethical guidance, that AI tools cannot replicate³. This ongoing negotiation underscores the evolving balance between human and machine contributions in ELT.

This paradox echoes broader debates in educational technology between technological determinism and teacher agency⁴. While the former assumes technology inevitably shapes practice, the latter emphasizes that its impact depends on teachers' values, beliefs, and contexts. Likewise, teacher identity theory holds that professional identity is fluid, continuously reconstructed in response to systemic and technological change⁵. In this light, AI becomes both a disruptor and a catalyst, compel-

ling teachers to renegotiate their roles in an evolving educational landscape.

In response, researchers have increasingly examined teachers' perceptions and attitudes as a lens for understanding broader pedagogical and professional transformations⁶. While prior studies indicate that EFL teachers' responses to AI are shaped by factors such as perceived usefulness, digital literacy, institutional support, and cultural norms, much of this work remains fragmented, context-bound, or narrowly focused on specific tools or learner outcomes⁷. A comprehensive synthesis is therefore needed, one that connects these insights to questions of professional identity, pedagogical integrity, and the evolving role of teachers in an AI-mediated educational landscape.

This scoping review responds to that need by mapping the literature on EFL teachers' attitudes, acceptance, and willingness to integrate AI technologies into their pedagogical practice. The focus on EFL contexts is particularly important because English teachers working in foreign-language environments often operate under pedagogical demands, policy expectations, workload pressures, and digital infrastructure constraints that differ markedly from those faced by educators in broader ELT settings. These contextual features shape how EFL teachers perceive AI, negotiate its benefits and risks, and adapt their professional roles. Accordingly, this review places special emphasis on how EFL teachers' attitudes intersect with role adaptation, professional autonomy, and teacher expertise in the AI era. Framed through a teacher-centered perspective informed by sociocultural theories of professional learning⁸, the review argues that AI adoption is not merely a technical adjustment but is deeply tied to educators' beliefs, values, and evolving identities.

Unlike prior reviews that emphasize learners or tool-specific affordances, this study foregrounds the teacher as the central actor in AI integration. By synthesizing findings across diverse EFL contexts, it identifies thematic trends, conceptual gaps, and underrepresented regions. In doing so, it not only contributes to the growing body of literature on AI in education but also clarifies the professional, pedagogical, and contextual dimensions shaping EFL teachers' engagement with AI. Building on these considerations, the present review pursues the following four primary objectives:

- Identify and categorize existing research on EFL teachers' attitudes toward AI tools.

1- Umayya Farooq, Sajad Ahmad Malik, and Altaf Shah Syed, "Revolutionizing Higher Education: The Transformative Impact of Artificial Intelligence on Teaching, Learning, and Career Preparation," *ShodhKosh Journal of Visual and Performing Arts* 5, no. 3 (2024): 789–794, <https://doi.org/10.29121/shodhkosha.v5.i3.2024.3239>; Lasha Labadze, Maya Grigolia, and Lela Machaidze, "Role of AI Chatbots in Education: A Systematic Literature Review," *International Journal of Educational Technology in Higher Education* 20 (2023): 56, <https://doi.org/10.1186/s412391-00426-023>; Sirin Sawangwan, "ChatGPT vs. Teacher Roles in Developing EFL Writing," *International Journal of Computer-Assisted Language Learning and Teaching* 14, no. 1 (2024): 1–21, <https://doi.org/10.4018/IJCALLT.361235>.

2- Farooq, "Revolutionizing Higher Education.";

3- Sawangwan, "ChatGPT vs. Teacher Roles in Developing EFL Writing."

4- Neil Selwyn, "The Future of AI and Education: Some Cautionary Notes," *European Journal of Education* 57, no. 4 (2022): 620–631, <https://doi.org/10.1111/ejed.12532>; Peggy Ertmer and Anne T. Ottenbreit-Lefwich, "Teacher Technology Change: How Knowledge, Confidence, Beliefs, and Culture Intersect," *Journal of Research on Technology in Education* 42, no. 3 (2010): 255–284, <https://doi.org/10.1080/15391523.2010.10782551>

5 Catherine Beauchamp and Lynn Thomas, "Understanding Teacher Identity: An Overview of Issues in the Literature and Implications for Teacher Education," *Cambridge Journal of Education* 39, no. 2 (2009): 175–189, <https://doi.org/10.1080/03057640902902252>; Sanne F. Akkerman and Paulien C. Meijer, "A Dialogical Approach to Conceptualizing Teacher Identity," *Teaching and Teacher Education* 27, no. 2 (2011): 308–319, <https://doi.org/10.1016/j.tate.2010.08.013>.

6- Nur Sakinah Zulkarnain and Melor Md Yunus, "Primary Teachers' Perspectives on Using Artificial Intelligence Technology in English as a Second Language Teaching and Learning: A Systematic Review," *International Journal of Academic Research in Progressive Education and Development* 12, no. 2 (2023), <https://doi.org/10.6007/IJARPEd.v12-i2/17119>.

7- Vatsala Tamil Selvam and Nur Yasmin Khairani Zakaria, "A Systematic Literature Review of the Impact of Using Artificial Intelligence (AI) Tools in English Language Teaching and Learning," *International Journal of Academic Research in Progressive Education and Development* 13, no. 3 (2024): 3464–3480, <https://doi.org/10.6007/IJARPEd.v13-i3/22863>.

8- Sue Lasky, "A Sociocultural Approach to Understanding Teacher Identity, Agency and Professional Vulnerability in a Context of Secondary School Reform," *Teaching and Teacher Education* 21, no. 8 (2005): 899–916, <https://doi.org/10.1016/j.tate.2005.06.003>.

- Examine how AI integration affects EFL teachers' professional identity, including their sense of expertise, autonomy, and pedagogical role.
- Analyze the key benefits and challenges that EFL teachers associate with AI technologies in language instruction.
- Highlight gaps in the literature to inform future research and policy recommendations.

Aligned with these objectives, the review seeks to address the following research questions:

- 1.What does the existing literature reveal about EFL teachers' attitudes toward AI integration in education?
- 2.What are the main factors influencing EFL teachers' attitudes toward AI, including perceived benefits and concerns?
- 3.How do EFL teachers' concerns about AI relate to their professional identity, autonomy, and job security?
- 4.What gaps exist in the literature regarding AI integration and its impact on teachers' roles, identities, and teaching practices?

Literature Review

Artificial Intelligence in Education and ELT

Both teachers and students are nowadays increasingly integrating AI technologies into teaching and learning processes. Teachers use these applications to support lesson planning, prepare teaching materials, and grade assignments⁹. These uses not only enhance instructional efficiency but also reflect teachers' adaptive practices¹⁰. In addition, teachers employ AI to boost learner engagement while alleviating the burden of managing all technological aspects of instruction¹¹. For learners, tools such as chatbots, writing assistants, and intelligent tutoring systems support personalized learning by facilitating task completion, offering instant feedback, correcting errors, and assisting with assessment¹². Consequently, the adoption of such tools in teaching and learning is steadily increasing¹³. In particular, ChatGPT has emerged as a central tool in students' writing instruction and assessment¹⁴. In fact, both practitioner in insights and empirical research further suggest that AI can positively contribute to the development of lan-

guage skills. For instance, Al-Zahrani and Alotaibi¹⁵ reported significant improvements in writing task achievement, coherence, and fluency among Saudi EFL high school students following an eight-week intervention using ChatGPT.

Despite its advantages, AI integration in education raises several structural and operational challenges that require careful consideration. Scholars have identified several barriers that could hinder the large-scale adoption of AI in educational settings. A key concern relates to data and algorithmic bias, as Yin et al.¹⁶ note that uneven or unrepresentative datasets may reinforce existing inequalities and unfairly disadvantage groups of learners. Celik et al.¹⁷ add that technical limitations, such as unreliable algorithms, underdeveloped infrastructure, and delayed feedback cycles, also constrain AI's classroom effectiveness. A frequently cited obstacle across contexts is the lack of teacher training and inadequate digital infrastructure, particularly in developing countries with limited institutional support¹⁸. Even in better-resourced environments, these challenges can lead to emotional strain or "digital burnout" among educators, compounded by increased screen time and the relentless pace of technological change¹⁹.

Beyond these broader systemic concerns, educators also grapple with practical ethical issues arising from both their own use of AI and students' reliance on such tools. Teachers often express discomfort with students' overreliance on AI for generating essays and completing assignments, raising alarms about academic dishonesty and the erosion of learners' critical thinking skills²⁰. Alawneh et al.²¹ and Al-Zahrani²² explore how issues of ethical transparency and equitable access intersect with teacher resistance. These concerns contribute to a broader atmosphere of mistrust and uncertainty, even among educators who otherwise recognize the pedagogical value of AI.

15- Fahd Alzahrani and Haef Alotaibi, "The Impact of Artificial Intelligence on Enhancing EFL Writing Skills among High School Students," *Journal of Education and Human Sciences*, no. 34 (2024): 226–240, <https://doi.org/10.33193/JEHS.34.2024.482>.

16- Zhipeng Yin, Sribala Vidyadhari Chinta, Zichong Wang, Matthew Gonzalez, and Wenbin Zhang, "FairAIED: Navigating Fairness, Bias, and Ethics in Educational AI Applications," *arXiv* (2024), <https://doi.org/10.48550/arXiv.2407.18745>.

17- Ismail Celik, Mert Dindar, Hanni Muukkonen, and Sanna Järvelä, "The Promises and Challenges of Artificial Intelligence for Teachers: A Systematic Review of Research," *TechTrends* 66 (2022): 616–630, <https://doi.org/10.1007/s11528-022-00715-y>.

18- Jimson Echave, Vicelyn Donato, and Ofelia Acoŝta, "Embracing Generative AI in Education: Exploring Teachers' Perceptions, Practices, and Potential Impact," *Jurnal Pendidikan Indonesia Gemilang* 4, no. 2 (2024): 211–232, <https://doi.org/10.53889/jpig.v4i2.458>.

19- Qing Zhou, Harwati Hashim, and Nur Ainil Sulaiman, "Digital Echoes: Crafting Chinese EFL Teacher Identity in the Era of AI-Enhanced Instruction—A Qualitative Exploration," *Forum for Linguistic Studies* 6, no. 5 (2024): 32–50, <https://doi.org/10.30564/fls.v6i5.6864>.

20- Jenny Pettersson, Elias Hult, Tim Eriksson, and Tosin Adewumi, "Generative AI and Teachers—For Us or Against Us? A Case Study," *arXiv* (2024), <https://doi.org/10.48550/arXiv.2404.03486>.

21- Alawneh, Yousef Jaber Jamel, Enas Nabeel Zaki Radwan, Falsten Nayef Salman, Shadia Issa Jeries Makhoulouf, Kamal Makhmreh, and Muawiyah Saleh Alawneh, "Ethical Considerations in the Use of AI in Primary Education: Privacy, Bias, and Inclusivity." In *2024 International Conference on Knowledge Engineering and Communication Systems (ICKECS)*, 1–6. Chikkaballapur, India, 2024. <https://doi.org/10.1109/ICKECS61492.2024.10616986>.

22- Abdulrahman M. Al-Zahrani, "Unveiling the Shadows: Beyond the Hype of AI in Education," *Heliyon* 10, no. 9 (2024): e30696, <https://doi.org/10.1016/j.heliyon.2024.e30696>.

9- Farooq, "Revolutionizing Higher Education.," Labadze, Grigolia, and Machaidze, "Role of AI Chatbots in Education.," Sawangwan, "ChatGPT vs. Teacher Roles in Developing EFL Writing."

10- Changyin Zhou and Fanfan Hou, "How Do EFL Teachers Utilize AI Tools in Their Language Teaching?" *Theory and Practice in Language Studies* 15, no. 2 (2025): 403–413, <https://doi.org/10.17507/tpls.1502.10>.

11- Alexandre Machado, Kamilla Tenório, Mateus Santos, Aristoteles Barros, Luiz Rodrigues, Rafael Mello, Ranilson Paiva, and Diego Derneval, "Workload Perception in Educational Resource Recommendation Supported by Artificial Intelligence: A Controlled Experiment with Teachers," *Smart Learning Environments* 12 (2025): 20, <https://doi.org/10.1186/s40561-025-00373-6>.

12- Labadze, Grigolia, and Machaidze, "Role of AI Chatbots in Education."

13- Yousif A. Alshumaimeri and Abdulrahman K. Alshememry, "The Extent of AI Applications in EFL Learning and Teaching," *IEEE Transactions on Learning Technologies* 17 (2024): 653–663, <https://doi.org/10.1109/TLT.2023.3322128>.

14- Ali Derakhshan and Farhad Ghiasvand, "Is ChatGPT an Evil or an Angel for Second Language Education and Research? A Phenomenographic Study of Research-Active EFL Teachers' Perceptions," *International Journal of Applied Linguistics* 34 (2024): 1246–1264, <https://doi.org/10.1111/ijal.12561>; Blanka Klimova, Miroslav Pikhart, and Liqaa Habeb Al-Obaydi, "Exploring the Potential of ChatGPT for Foreign Language Education at the University Level," *Frontiers in Psychology* 15 (2024): 1269319, <https://doi.org/10.3389/fpsyg.2024.1269319>.

With such complexities between benefits, challenges, and concerns, teachers' attitudes toward such tools or technologies emerge as a relevant area for investigation, especially due to the emotional toll of this technology. Some studies showed that many teachers report anxiety about their long-term professional relevance and fear that AI may replace human-centered aspects of instruction²³. In other words, as AI systems assume more responsibility for content delivery and feedback, the teacher's traditional role as a primary knowledge source is shifting toward that of a facilitator or learning guide. Although this shift may foster learner autonomy and promote more learner-centered approaches, it poses challenges for educators with limited digital literacy²⁴. At the same time, some teachers embrace AI as a collaborative "co-teacher"²⁵.

In terms of attitudes, paralleling the polarized nature of the situation, research shows that teachers' views on AI are often mixed, shaped by an interplay of perceived benefits, technological ease, and contextual constraints. For instance, Cubio²⁶ confirms that concerns about data privacy, algorithmic bias, and classroom surveillance, discussed earlier, significantly affect teachers' readiness to adopt AI tools.

Wu²⁷ and Zhou et al.²⁸ underscore that AI adoption often necessitates continuous professional development to keep pace with evolving instructional demands. Zulkarnain and Yunus²⁹ similarly found that educators' perceptions are largely influenced by factors such as digital literacy, teaching experience, and institutional support. Gao et al.³⁰, in a study involving 278 preservice teachers in China, found that hands-on experience with AI technologies significantly increased perceived usefulness and the intention to adopt them. Gao et al.³¹ also reported that structured training programs further enhanced acceptance, even among participants with low digital confidence. They additionally found that although personality traits influenced behavioral intentions, they did not affect perceived ease of use.

Studies drawing on the Technology Acceptance Model (TAM) consistently show that perceived usefulness, ease of use, and enjoyment are strong predictors of AI integration³², indicat-

ing that teachers are more likely to adopt AI when these factors are present. A recent study by Mulyani et al.³³ further supports these patterns, drawing on survey data from 466 vocational high school teachers in Indonesia and employing TAM and Structural Equation Modeling. The authors found that perceived usefulness, ease of use, and ease of learning significantly influenced teachers' intention to adopt AI, with perceived usefulness emerging as the strongest predictor. Consistent with findings from other studies, participants reported benefits such as improved lesson content creation, more student-centered instruction, and enhanced personalization of learning. At the same time, they identified challenges including technical limitations, data privacy concerns, and the need for ongoing teacher training. Echoing earlier research, Mulyani et al. emphasized that generative AI should serve as a complement, not a substitute, for teachers, highlighting the importance of thoughtful pedagogical integration, sustained professional development, and institutional support for effective long-term implementation.

This shifting professional landscape reflects more than a simple transfer of responsibilities; it represents a broader redefinition of teachers' sense of identity and professional agency. These changes also carry significant emotional and psychological implications.

Prior Reviews on Teachers' Perceptions in the Context of AI

Several systematic and scoping reviews provide a critical backdrop for this study, offering insight into the broader landscape of AI in ELT, particularly within EFL contexts. These reviews, which are examined in detail in the subsequent paragraphs, collectively affirm AI's instructional potential, especially in enhancing writing, speaking, and feedback practices. They also highlight the concerns and challenges identified by researchers and study participants alike. In other words, these reviews extensively explored AI's pedagogical potential and its impact on learner outcomes. Yet, far fewer reviews have critically examined how these technologies are reshaping the roles, identities, and emotional landscapes of teachers. The pace and scope of AI integration demand new forms of teacher adaptability, mediation, and professional reflection. By centering teacher perspectives, this review addresses an urgent need to map how EFL educators experience, interpret, and respond to AI within their pedagogical and institutional realities.

Zulkarnain and Yunus³⁴ conducted a systematic review of ESL teachers' perceptions of AI, with a particular focus on primary education. They organized their findings around four core dimensions: effectiveness, convenience, motivation, and

23- Ramesh Govindarajan and Gali Christuraj, "Opportunities and Challenges of Using ChatGPT in the ELT Scenario of UTAS, Nizwa, Oman," *Journal of Teaching English for Specific and Academic Purposes* 11, no. 3 (2023): 593–605, <https://doi.org/10.22190/JTESAP230529046G>.

24 Chong Liu and Yun Xu, "A Visual Analysis of the Research Literature on Teachers' Digital Literacy (2015–2024)," *Frontiers in Education* 10 (2025): 1–14, <https://doi.org/10.3389/educ.2025.1597121>.

25 Sawangwan, "ChatGPT vs. Teacher Roles in Developing EFL Writing."

26- Joel V. Cubio, "The Influence of Privacy, Bias, and Surveillance Concerns on Teachers' Willingness to Use Artificial Intelligence in Education," *International Journal of Research and Innovation in Social Science* 9, no. 3 (2025): 3192–3208, <https://doi.org/10.47772/IJRISS.2025.903SEU0240>.

27- Runqiu Wu, "The Impact of Artificial Intelligence-Assisted Teaching on Teachers' Instructional Development," *Journal of Education, Humanities and Social Sciences* 45 (2024): 19–23, <https://doi.org/10.54097/7821c148>.

28- Qing Zhou, Harwati Hashim, and Nur Sulaiman, "Digital Echoes."

29- Zulkarnain and Yunus, "ESL Teachers' Perceptions of AI Integration."

30- Ming Gao, Huilun Zhang, Yuqi Dong, and Jingwei Li, "Embracing Generative AI in Education: An Experiential Study on Preservice Teachers' Acceptance and Attitudes," *Educational Studies* 52, no. 3 (2026): 344–363, <https://doi.org/10.1080/03055698.2025.2483831>.

31- Gao et al., "Embracing Generative AI in Education."

32- Chengming Zhang, Jessica Schiefl, Lea Plöbl, Florian Hofmann, and Michaela Gläser-Zikuda, "Acceptance of Artificial Intelligence among Pre-Ser-

vice Teachers: A Multigroup Analysis," *International Journal of Educational Technology in Higher Education* 20 (2023): 49, <https://doi.org/10.1186/s41239-023-00420-7>; Özlem Gökçe Tekin, "Factors Affecting Teachers' Acceptance of Artificial Intelligence Technologies: Analyzing Teacher Perspectives with Structural Equation Modeling," *Instructional Technology and Lifelong Learning* 5, no. 2 (2024): 399–420, <https://doi.org/10.52911/ital.1532218>.

33- Heni Mulyani, Mohamad Istiaq, Elvia R. Shauki, Fitriana Kurniati, and Hanifia Arlinda, "Transforming Education: Exploring the Influence of Generative AI on Teaching Performance," *Cogent Education* 12, no. 1 (2025), <https://doi.org/10.1080/233118X.2024.2448066>.

34- Zulkarnain and Yunus, "ESL Teachers' Perceptions of AI Integration."

challenges. The review indicated that teachers generally perceived AI tools as efficient, engaging, and helpful in reducing workload, thus positively influencing classroom dynamics. However, it also identified persistent challenges, including limited digital literacy, insufficient infrastructural support, classroom management issues, teacher burnout, and ethical concerns.

Similarly, Alshumaimeri and Alshememry³⁵ conducted a systematic review of 80 studies on AI applications in EFL classrooms, emphasizing their impact on language proficiency, pedagogical design, and teacher roles. Their review highlighted AI's potential to transform instruction and assessment by offering immediate feedback, enabling speaking simulations, and supporting individualized learning. While they included some studies on teachers' perceptions, the analysis leaned predominantly toward a skill-based focus. That is, they focused particularly on argumentative writing and AI-assisted feedback systems, reflecting the emphasis of the selected studies. The authors also noted a lack of classroom-based research and raised ethical concerns, such as data privacy and the potential de-skilling of educators. These findings underscore the need for more teacher-centered, pedagogically grounded investigations into how AI is integrated into classroom practice.

Sharadgah and Sa'di³⁶ systematically reviewed 64 studies on AI in ELT published between 2015 and 2021. Their analysis identified recurring themes such as automated translation, speech recognition, intelligent feedback, writing, speaking, and assessment. It highlighted AI's capacity to enhance language skills, learner attitudes, and overall satisfaction. However, most studies were conducted by educators outside the ELT field, with limited attention to teacher training, adaptability, or evolving pedagogical roles. The authors also raised broader concerns about the ethical, social, and linguistic implications of AI integration.

Complementing these, other recent reviews provide sharper insights into the specific gaps this scoping review aims to address. For example, Almeahmadi³⁷ examined how AI has been integrated into EFL teaching, analyzing 13 studies selected from an initial pool of 284 published between 2019 and 2023. The review highlighted the pedagogical benefits of chatbots, automated writing evaluation tools, and writing assistants in supporting speaking, listening, and writing instruction. While affirming AI's instructional potential, the study emphasized the challenge of selecting appropriate tools amid rapid technological innovation and called for more guidance on effective classroom implementation.

Sim and Ismail³⁸ conducted a systematic review of 24 empiri-

cal studies examining English language teachers' perspectives on digital tools in teaching. Their review included studies published between 2019 and 2023. Most teachers expressed generally positive attitudes toward digital integration, with acceptance shaped by factors such as digital literacy, computer readiness, perceived usefulness, and prior experience. At the same time, the review identified persistent barriers including insufficient training, poor technical infrastructure, and lack of institutional support. Although not focused exclusively on AI, the study reinforces key concerns echoed in AI-related literature, particularly around teacher agency, confidence, and the need for pedagogically grounded implementation strategies.

Offering a more affective perspective, Al-Twijri and Alghizzi³⁹ conducted a systematic review of 21 empirical studies published between 2017 and 2023. They investigated the emotional and psychological impacts of AI use in EFL higher education. Unlike reviews focused primarily on skill development, this study explored AI's role in enhancing learners' motivation, engagement, attitudes, and reducing anxiety. While the findings suggested overall positive trends, the authors stressed that research on AI's affective impacts remains in its early stages and lacks theoretical depth. Although it highlighted gaps in understanding how AI influences learners' emotional experience, it did not examine teachers' roles in shaping or responding to these affective shifts.

Selvam and Zakaria⁴⁰ examined the integration and pedagogical implications of AI tools in English language teaching across 25 empirical studies. The review identified four primary thematic domains: learning and skill development, teacher and professional development, technological integration and challenges, and student experience and perception. While the findings reinforced AI's capacity to enhance writing proficiency, foster critical thinking, and support dynamic, personalized learning, the review also underscored persistent barriers. These included insufficient teacher training, ethical ambiguities, and technical constraints that hinder seamless classroom implementation. Although teacher perspectives were addressed under the theme of professional development, the review did not deeply explore how educators interpret or experience AI-mediated environments. It also overlooked how teachers emotionally respond to these shifts, highlighting the ongoing need for teacher-centered research that examines professional identity, role changes, and the realities of classroom practice.

In addition, Alhusaiyan⁴¹ conducted a systematic review of 15 empirical studies published over the past decade, aiming to trace advancements and challenges in AI-supported language learning. Framed through activity theory, the review examined how AI tools interact with core educational components

tives," *Creative Education* 14 (2023): 2021–2036, <https://doi.org/10.4236/ce.2023.1410129>.

39- Lujain Al-Twijri and Talal Musaed Alghizzi, "Investigating the Integration of Artificial Intelligence in English as Foreign Language Classes for Enhancing Learners' Affective Factors: A Systematic Review," *Heliyon* 10, no. 10 (2024): e31053, <https://doi.org/10.1016/j.heliyon.2024.e31053>.

40- Selvam and Zakaria, "A Systematic Literature Review of the Impact of Using Artificial Intelligence."

41- Eman Alhusaiyan, "A Systematic Review of Current Trends in Artificial Intelligence in Foreign Language Learning," *Saudi Journal of Language Studies* 5, no. 1 (2025): 1–16, <https://doi.org/10.1108/SJLS-07-2024-0039>.

35- Alshumaimeri and Alshememry, "The Extent of AI Applications in EFL Learning and Teaching."

36- Talha Sharadgah and Rami Sa'di, "A Systematic Review of Research on the Use of Artificial Intelligence in English Language Teaching and Learning (2015–2021): What Are the Current Effects?" *Journal of Information Technology Education: Research* 21 (2022): 337–377, <https://doi.org/10.28945/4999>.

37- Wesam Almeahmadi, "Exploring the Potential of AI Techniques in Teaching English as a Foreign Language: A Systematic Literature Review," *Asian Journal of Social Science and Management Studies* 11, no. 2 (2024): 22–31, <https://doi.org/10.20448/ajssms.v11i2.5576>.

38- Jennifer Sim and Hanita Ismail, "Using Digital Tools in Teaching and Learning English: Delving into English Language Teachers' Perspec-

such as pedagogical goals, user roles, community structures, and classroom practices. The findings confirmed that AI technologies enhance key learning outcomes, particularly writing quality, scoring accuracy, and learner engagement. However, the review also highlighted enduring challenges in cultivating dialogic competence and authentic communication, emphasizing that AI cannot substitute for instructional design or teacher-led intervention. Further, the study identified a lack of classroom-based empirical research and called for further inquiry into how both learners and teachers engage with AI in real-world settings. It stressed the importance of integrating AI tools within established educational theories and cautioned against purely technical implementation that overlooks teacher agency, contextual adaptation, and pedagogical intent.

These reviews confirm that while AI has emerged as a prominent focus in language education research, the field remains underdeveloped in its treatment of teachers, especially with regard to their perceptions, evolving professional roles, and emotional responses

Methodology

This review followed Arksey and O'Malley's⁴² five-stage methodological framework as shown in Table 1 below. However, consistent with the iterative nature of scoping reviews, earlier phases were revisited throughout the process to refine the search focus, inclusion criteria, and ensure alignment with the evolving research questions.

Table 1. The Stages of Conducting the Review Guided by Arksey and O'Malley's Framework

Stage	Description
1. Identifying the Research Question	Define clear and structured research questions to guide the review.
2. Identifying Relevant Studies	Search for relevant literature across multiple databases and sources, including grey literature.
3. Study Selection	Establish inclusion and exclusion criteria, and systematically select studies.
4. Charting the Data	Extract key information from selected studies, categorizing themes and findings.
5. Collating, Summarizing, and Reporting Results	Synthesize the findings, identify trends and gaps, and present the results clearly.

To comprehensively map the literature on EFL teachers' attitudes and perceptions toward AI integration, a hybrid search model was adopted, combining traditional academic databases with AI-assisted tools. The growing recognition of AI tools in academic research lies in their ability to enhance search precision and provide analytical insights when used appropriately⁴³. These tools are now widely recommended by research-

42 Hilary Arksey and Lisa O'Malley, "Scoping Studies: Towards a Methodological Framework," *International Journal of Social Research Methodology* 8, no. 1 (2005): 19–32, <https://doi.org/10.1080/1364557032000119616>.
43 Francisco Bolaños, Angelo Salatino, Francesco Osborne, and Enrico Motta, "Artificial Intelligence for Literature Reviews: Opportunities and Challenges," *Artificial Intelligence Review* 57 (2024): 259, <https://doi.org/10.1007/s10462-024-10902-3>; Sanne H B van Dijk, Marjolein Brusse-Keizer, Charlotte C Bucsán, Job van der Palen, Carine Doggen, and Anke Lenferink, "Artificial Intelligence in Systematic Reviews: Promising When Appropriately Used," *BMJ Open* 13 (2023): e072254, <https://doi.org/10.1136/bmjopen-2023-072254>.

ers and educators for their efficiency in identifying relevant sources. Whelan et al.⁴⁴, for example, described AI-assisted Medline tools as valuable supplements to traditional searches, improving comprehensiveness in systematic reviews.

In more detail, the search for this study was conducted using traditional platforms, Google Scholar, Semantic Scholar, Scopus, and Web of Science, alongside AI-enhanced tools such as Scispace, Elicit, Scite, and Consensus. The process began with broad exploratory queries and evolved iteratively through refined search strings and prompts. While maintaining methodological rigor, the review prioritized breadth and thematic discovery over strict filtering, in line with scoping review conventions.

- “Do higher education EFL teachers exhibit willingness, acceptance, or resistance regarding AI integration?” (Scispace)
- “What are EFL teachers’ coping strategies for facing technology challenges?” (Scispace)
- “How do EFL teachers adapt to AI integration in classrooms?” (Consensus)
- “What does existing research say about ELT teachers’ resilience and AI integration?” (Consensus)

Search using terms like “job security” or “emotions” often returned unrelated studies (e.g., general HR or pandemic-related

44- Jane Whelan, Mohammad Ghoniem, Nicolas Médoc, Mike Apicella, and Ekkehard Beck, “Applying a Novel Approach to Scoping Review Incorporating Artificial Intelligence: Mapping the Natural History of Gonorrhoea,” *BMC Medical Research Methodology* 21 (2021): 183, <https://doi.org/10.1186/s12874-021-01367-x>.

Each platform was searched independently. Results were refined, saved, and cross-checked across tools to ensure relevance and coverage. AI platforms were particularly useful in identifying interconnections, emerging patterns, and research gaps. The following are some of the Boolean Search strings used for the search:

- (“English language teachers” OR “ELT teachers” OR “EFL teachers”)
- AND (“Artificial Intelligence” OR “AI” OR “ChatGPT”)
- AND (“perceptions” OR “attitudes” OR “views” OR “beliefs”)
- AND (“adaptation” OR “challenges” OR “coping strategies”)

burnout) and were excluded due to misalignment with the review’s EFL-specific scope.

Examples of the AI platform prompts are provided below:

The findings were categorized thematically and refined conceptually throughout the review, allowing both structured exploration and flexibility

Inclusion Criteria

To ensure focus and relevance, included studies met the following criteria:

- Explicitly addressed EFL teachers’ perceptions, experiences, or attitudes toward AI.
- Published in peer-reviewed academic journals.
- Released from 2020 onward, reflecting the rise of AI in education.
- Written in English.

Exclusion Criteria

Studies were excluded if they:

- Were non-empirical (e.g., conceptual papers or reviews).
- Focused solely on pre-service or student teachers.
- Examined only student perspectives, with no reference to teacher views.
- Fell outside the EFL context, including general education or industrial AI uses.
- Were published before 2020, and therefore did not reflect current AI developments in language teaching.

Findings

This scoping review analyzed 44 studies published between 2022 and 2025. The geographical distribution of the studies was diverse, with the majority conducted in Asia (notably Indonesia, Iran, Saudi Arabia, China, and Malaysia), followed by representation from Eastern Europe (e.g., Ukraine, Kazakhstan), Africa (Ethiopia), and Latin America (Chile).

Most studies focused on in-service EFL teachers, with participants ranging from small-scale interview cohorts (3–20 teachers) to large-scale surveys of up to 543 teachers⁴⁵, which included 543 teachers. A few studies also examined novice teachers⁴⁶, although this group remains underrepresented.

In terms of educational levels, most participants worked in secondary or tertiary education, with fewer studies examining early childhood or vocational EFL settings. Methodologically, qualitative research designs predominated, particularly semi-structured interviews, although mixed-methods⁴⁷ and quanti-

45- Sabha Hakim Allehyani and Mohammed Abdullah Algamdi, “Digital Competences: Early Childhood Teachers’ Beliefs and Perceptions of ChatGPT Application in Teaching English as a Second Language (ESL),” *International Journal of Learning, Teaching and Educational Research* 22, no. 11 (2023): 343–363, <https://doi.org/10.26803/ijlter.22.11.18>.
46- Benjamin Luke Moorhouse, “Beginning and First-Year Language Teachers’ Readiness for the Generative AI Age,” *Computers and Education: Artificial Intelligence* 6 (2024): 100201, <https://doi.org/10.1016/j.caeai.2024.100201>.
47- Ahmed Metwally and Waleed Bin-Hady, “Probing the Necessity and Advantages of AI Integration Training for EFL Educators in Saudi Arabia,” *Co-*

tative survey-based studies⁴⁸ were also represented.

The studies provide valuable insights into how EFL teachers engage with AI, i.e. viewing it either as a supportive instructional aid or a disruptive force to established teaching paradigms. Most conclude by acknowledging both the benefits and the concerns. The findings have been synthesized and thematically categorized in Appendix 1 to highlight prevailing concerns, emerging patterns, and underexplored gaps in the literature. Owing to paper constraints, details of the reviewed studies, including their methodologies, participants, and contexts or countries, are provided in the appendix. Across the reviewed studies, those explicitly examining teachers’ perceptions of AI integration in teaching consistently reported largely positive attitudes, shaped by perceptions of AI’s potential, ease of use, and pedagogical value.

Discussion

This section synthesizes the findings of the scoping review by drawing together the major themes that emerged across the included studies. To orient the discussion, Figure 1 presents an overview of these themes, subthemes, and their interconnections, after which the analysis proceeds according to the four research questions.

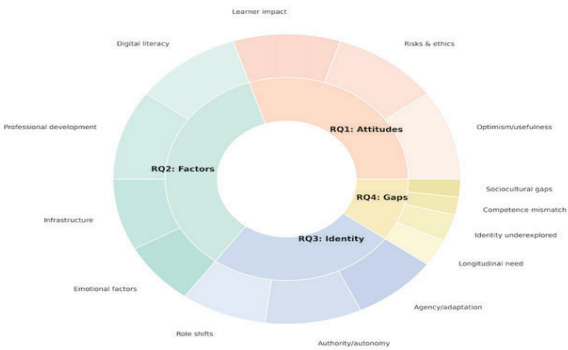


Figure 1. Hierarchical thematic wheel of themes and subthemes identified in the scoping review.

Addressing the first research question, which explored EFL teachers’ attitudes toward the integration of AI into ELT, the reviewed studies reveal a cautiously optimistic stance⁴⁹ Across
gent Education 12, no. 1 (2025): 2472462, <https://doi.org/10.1080/2331186X.2025.2472462>.
48- Hoorra Dehghani and Amir Mashhadi, “Exploring Iranian English as a Foreign Language Teachers’ Acceptance of ChatGPT in English Language Teaching: Extending the Technology Acceptance Model,” *Education and Information Technologies* 29 (2024): 19813–19834, <https://doi.org/10.1007/s10639-024-12660-9>.
49- Allehyani and Algamdi, “Digital Competences: Early Childhood Teachers’ Beliefs and Perceptions of ChatGPT Application.”; Dehghani and Mashhadi, “Exploring Iranian English as a Foreign Language Teachers’ Acceptance of ChatGPT in English Language Teaching.”; Selim Soner Sütçü and Elif Sütçü, “English Teachers’ Attitudes and Opinions towards Artificial Intelligence,” *International Journal of Research in Teacher Education* 14, no. 3 (2023): 183–193, <https://doi.org/10.29329/ijrte.2023.598.12>; Fernando Vera and Palabras clave, “Integrating Artificial Intelligence (AI) in the EFL Classroom: Benefits and Challenges,” *Transformar* 4, no. 2 (2023): 66–77, <https://revistatransformar.cl/index.php/transformar/article/view/93>; Olena Chukhno, “Teachers and Learners’ Perspectives on the Use of Generative AI in Foreign Language Education,” *Modern Information Technologies and Innovation Methodologies of Education in Professional Training: Methodology, Theory, Experience, Problems* 73 (2024): 53–60, <https://doi.org/10.31652/2412-1142-2024-73-53-60>; Israa Najm Abed, Rafid Sabah Abdalradahi Al-Tamimi, Khamael Shakir Ghanim, and Baydaa Hasan Nashmi,

multiple studies, teachers highlighted the usefulness of ChatGPT and other AI tools in enhancing learners' L2 learning experiences and increasing engagement⁵⁰. Abbasi et al.⁵¹, Tümen Akyıldız⁵², and Rof'i et al.⁵³ likewise associated the use of such tools with improved student engagement, motivation, and other positive learning outcomes. These tools also support personalized learning, help address ideological biases⁵⁴, foster critical thinking, and promote inclusive education⁵⁵. Such findings align with prior reviews. Alshumaimeri and Alshememry⁵⁶ emphasized AI's role in strengthening writing, speaking, and feedback practices.

Attitudes, however, are shaped not only by perceived benefits but also by perceived risks, which aligns with the second research question. Reported benefits include reduced workload⁵⁷, time savings in grading, lesson planning, and resource creation⁵⁸, as well as increased collaboration and creativity

in lesson design⁵⁹. These mean greater teacher efficiency⁶⁰. Such patterns echo earlier conclusions by Zulkarnain and Yunus⁶¹ and Mulyani et al.⁶², who identified convenience and workload reduction as key drivers of teacher acceptance.

Teachers also expressed openness toward AI tools that support lesson planning, assessment, and student engagement⁶³. This trend aligns with Sim and Ismail⁶⁴, Zhang et al.⁶⁵, Tekin⁶⁶, and Gao et al.⁶⁷, whose findings show that digital literacy, perceived usefulness, and prior experience shape positive attitudes toward technology integration. Yet, this openness is tempered by uncertainty, particularly regarding ethical and pedagogical concerns such as cheating, plagiarism, and content authenticity⁶⁸, as well as broader concerns related to academic integrity and the reliability of AI-generated content⁶⁹. Sharadgah and Sa'di⁷⁰ and Alhusaiyan⁷¹ similarly identified ethical risks, de-skilling concerns, and the essential need to preserve teacher-led intervention. Teachers also voiced concerns about AI's impact on learners' critical thinking and research skills⁷², the overuse of AI by learners with limited

"A Qualitative Study of English Language Teachers' Perceptions on Teaching English Language through Artificial Intelligence in Public Education in Iraq," in *Intelligent Systems, Blockchain, and Communication Technologies*, edited by A. Abdelgawad, A. Jamil, and A. A. Hameed, *Lecture Notes in Networks and Systems* 1268 (Cham: Springer, 2025), https://doi.org/10.1007/978-3-031-82377-0_11; Aldha Williyani, Sri Wuli Fitriati, Hendi Pratama, and Zulfa Sakhiyya, "AI as Co-Creator: Exploring Indonesian EFL Teachers' Collaboration with AI in Content Development," *Teaching English with Technology* 24, no. 2 (2024): 5–21, <https://doi.org/10.56297/vaca6841/LRDX3699/RZOH5366>; Ali Ahmed Ali Bedaiwy, "EFL Faculty Members' and Students' Perceptions of the Use of Artificial Intelligence Applications in Teaching English Language in University," *Egyptian Journal of Educational Sciences* 4, no. 2 (2024): 85–122, <https://doi.org/10.21608/ejes.2024.413505>; Romualdo Atibagos Mabuan, "ChatGPT and ELT: Exploring Teachers' Voices," *International Journal of Technology in Education* 7, no. 1 (2024): 128–153, <https://doi.org/10.46328/ijte.523>.
50- Mohammad H. Al-Khresh, "Bridging Technology and Pedagogy from a Global Lens: Teachers' Perspectives on Integrating ChatGPT in English Language Teaching," *Computers and Education: Artificial Intelligence* 6 (2024): 100218, <https://doi.org/10.1016/j.caeai.2024.100218>; Puna Ram Ghimire and Bharat Prasad Neupane, "Teachers' Perception and Experiences on Artificial Intelligence (AI) Integration in English Language Teaching and Learning," *Lumbini Journal of Language and Literature* 4, no. 1 (2024): 104–116, <https://doi.org/10.3126/ljll.v4i1.73918>.
51- Khadim Abbasi, Muhammad Solangi, and Muhammad Golo, "Use of ChatGPT in English Language Teaching: Teachers' Perspective," *Journal of Applied Linguistics and TESOL* 7, no. 4 (2024): 714–721.
52- Seçil Tümen Akyıldız, "Enhancing or Hindering? AI's Role in Sparking Creativity in Language Teaching: Insights from Private High School EFL Teachers," *International e-Journal of Educational Studies* 8, no. 18 (2024): 234–254, <https://doi.org/10.31458/iejes.1502509>.
53- Agus Rofi'i, Eka Nurhidayat, and Hastri Firharmawan, "Teachers' Professional Competence in Integrating Technology: A Case Study at English Teacher Forum in Majalengka," *International Journal of Language Education and Culture Review* 9, no. 1 (2023): 64–73, <https://doi.org/10.21009/ijlecr.v9i1.37683>.
54- Laleh Mohammadi, Marjan Asadi, and Rana Taheri, "Transforming EFL Lesson Planning with 'To Teach AI': Insights from Teachers' Perspectives," *Technology Assisted Language Education* 2, no. 3 (2024): 46–73, <https://doi.org/10.22126/taele.2025.11490.1080>.
55- Mohammadi, Asadi, and Taheri, "Transforming EFL Lesson Planning with 'To Teach AI.'"; Dara Tafazoli, "Exploring the Potential of Generative AI in Democratizing English Language Education," *Computers and Education: Artificial Intelligence* 7 (2024): 100275, <https://doi.org/10.1016/j.caeai.2024.100275>.
56- Alshumaimeri and Alshememry, "The Extent of AI Applications in EFL Learning and Teaching."
57- Chukhno, "Teachers and Learners' Perspectives on the Use of Generative AI"
58- Mohammadi, Asadi, and Taheri, "Transforming EFL Lesson Planning with 'To Teach AI.'"; Ecem Kopuz, "English Language Teachers' Insights on the Influence of ChatGPT on Professional Well-Being," *Journal of Educational Studies and Multidisciplinary Approaches* 4, no. 2 (2024): 138–154, <https://doi.org/10.51383/jesma.2024.107>.

59- Muhammed Parviz, "The Double-Edged Sword: AI Integration in English Language Education from the Perspectives of Iranian EFL Instructors," *Complutense Journal of English Studies* 32 (2024): e97261, <https://doi.org/10.5209/cjes.97261>.
60- Yunfei Du and Han Gao, "Determinants Affecting Teachers' Adoption of AI-Based Applications in EFL Context: An Analysis of Analytic Hierarchy Process," *Education and Information Technologies* 27 (2022): 9357–9384, <https://doi.org/10.1007/s10639-022-11001-y>.
61- Zulkarnain and Yunus, "ESL Teachers' Perceptions of AI Integration."
62- Mulyani et al., "Transforming Education: Exploring the Influence of Generative AI on Teaching Performance."
63- Vera, "Integrating Artificial Intelligence (AI) in the EFL Classroom."; Williyani et al., "AI as Co-Creator: Exploring Indonesian EFL Teachers' Collaboration with AI in Content Development."; Mohammadi, Asadi, and Taheri, "Transforming EFL Lesson Planning with 'To Teach AI': Insights from Teachers' Perspectives."; Elizabet Afreilyanti and Paulus Kuswandono, "Exploring Indonesian EFL Teachers' Agency and Self-Efficacy in Using Artificial Intelligence Tools," *IDEAS: Journal of English Language Teaching, Learning, Linguistics and Literature* 12, no. 2 (2024), <https://doi.org/10.24256/ideas.v12i2.5441>; Benjamin Luke Moorhouse and Lucas Kohnke, "The Effects of Generative AI on Initial Language Teacher Education: The Perceptions of Teacher Educators," *System* 122 (2024): 103290, <https://doi.org/10.1016/j.system.2024.103290>; Adriadi Novawan, Osamu Ikeda, and Stuart Anthony Walker, "The New Face of Technology-Enhanced Language Learning (TELL) with Artificial Intelligence (AI): Teacher Perspectives, Practices, and Challenges," *Journal of English Academic and Professional Communication* 10, no. 1 (2024): 1–18, <https://doi.org/10.25047/jeapco.v10i1.4565>.
64- Sim and Ismail, "Using Digital Tools in Teaching and Learning English."
65- Zhang et al., "Acceptance of Artificial Intelligence among Pre-Service Teachers."
66- Tekin, "Factors Affecting Teachers' Acceptance of Artificial Intelligence Technologies."
67- Gao et al., "Embracing Generative AI in Education: An Experiential Study on Preservice Teachers' Acceptance and Attitudes."
68- Mabuan, "ChatGPT and ELT: Exploring Teachers' Voices."; Inna Zaiarna, Olena Zhyhadlo, and Olha Dunaievska, "ChatGPT in Foreign Language Teaching and Assessment: Exploring EFL Instructors' Experience," *Information Technologies and Learning Tools* 102, no. 4 (2024): 176–191, <https://doi.org/10.33407/itlt.v102i4.5716>.
69- Chukhno, "Teachers and Learners' Perspectives on the Use of Generative AI in Foreign Language Education."; Clara Abisheva, Zina Koldasbaeva, Nazym Nossiyeva, Nazilya Irgebaeva, Ainash Aipova, Saule Doldinova, Samat Smoilov, Ryskeldy Aykenova, Lyazzat Umirzakova, and Mapruza Idrissova, "Formation of Ethical Competences for AI Use in English Foreign Language Teaching," *Qubahan Academic Journal* 4, no. 4 (2024): 191–205, <https://doi.org/10.48161/qaj.v4n4a1256>.
70- Sharadgah and Sa'di, "A Systematic Review of Research on the Use of Artificial Intelligence in English Language Teaching and Learning (2015–2021)."
71- Alhusaiyan, "A Systematic Review of Current Trends in Artificial Intelligence in Foreign Language Learning."
72- Areej Radhi Alruwaili and Zhila Kianfar, "Investigating EFL Female Saudi Teachers' Attitudes toward the Use of ChatGPT in English Language

digital literacy⁷³, and the potential suppression of linguistic creativity, cultural sensitivity, and language fidelity due to overreliance on AI tools⁷⁴. Similar findings and concerns were reported by Pettersson et al.⁷⁵, Alawneh et al.⁷⁶, Al-Zahrani⁷⁷, and Cubio⁷⁸.

Building on these insights, several additional factors further shape teachers' attitudes toward AI. Digital literacy and technological self-efficacy appear central⁷⁹, with technology-literate teachers demonstrating higher levels of student engagement and motivation⁸⁰. Relatedly, Afreilyanti and Kuswandono⁸¹ reported that teachers using AI in lesson planning, implementation, and assessment demonstrated higher self-efficacy, reinforcing the link between confidence and acceptance. In a similar vein, Ningsih et al.⁸² found that limited AI knowledge correlates with negative perceptions and heightened concern over critical thinking erosion. That said, lack of institutional support and poor infrastructure hinder adoption⁸³. These enabling and hindering factors mirror the

Teaching," *Forum for Linguistic Studies* 7, no. 2 (2025): 203–216, <https://doi.org/10.30564/fls.v7i2.7937>; Amr Mohamed, "Exploring the Potential of an AI-Based Chatbot (ChatGPT) in Enhancing English as a Foreign Language (EFL) Teaching: Perceptions of EFL Faculty Members," *Education and Information Technologies* 29 (2024): 3195–3217, <https://doi.org/10.1007/s10639-023-11917-z>.

73- Allehyani and Algamdi, "Digital Competences: Early Childhood Teachers' Beliefs and Perceptions of ChatGPT Application."

74- Al-Khresh, "Bridging Technology and Pedagogy from a Global Lens."; Nagamurali Eragamreddy, "AI in ELT: ChatGPT's Role in English Language Teaching and Learning," in *Using AI Tools in Text Analysis, Simplification, Classification, and Synthesis*, edited by N. Jomaa (Hershey, PA: IGI Global, 2025), 159–196, <https://doi.org/10.4018/979-8-3693-9511-0.ch006>.

75- Pettersson et al., "Generative AI and Teachers—For Us or Against Us? A Case Study," *arXiv* (2024), <https://doi.org/10.48550/arXiv.2404.03486>.

76- Alawneh et al., "Ethical Considerations in the Use of AI in Primary Education."

77- Al-Zahrani, "Unveiling the Shadows: Beyond the Hype of AI in Education."

78- Cubio, "The Influence of Privacy, Bias, and Surveillance Concerns on Teachers' Willingness to Use Artificial Intelligence in Education."

79- Mohammadi, Asadi, and Taheri, "Transforming EFL Lesson Planning with 'To Teach AI'."; Ismail Anas, Muhammad Basri, and Andi Musdariah, "Digital Language Teacher Professional Development from a CALL Perspective: Perceived Knowledge and Activeness in ECCER," *Computer Assisted Language Learning Electronic Journal* 23, no. 1 (2022): 1–21.; Afif Zuhdy Idham, Wahyuddin Rauf, and Abd Rajab, "Navigating the Transformative Impact of Artificial Intelligence on English Language Teaching: Exploring Challenges and Opportunities," *Jurnal Edukasi Saintifik* 4, no. 1 (2024): 8–14, <https://doi.org/10.56185/jes.v4i1.620>; Lihang Guan, John Chi-Kin Lee, Yue Zhang, and Mingyue Michelle Gu, "Investigating the Tripartite Interaction among Teachers, Students, and Generative AI in EFL Education: A Mixed-Methods Study," *Computers and Education: Artificial Intelligence* 8 (2025): 100384, <https://doi.org/10.1016/j.caeai.2025.100384>.

80- Guanbing Zhou and Zohreh. R. Eslami, "EFL Teachers' Perceptions of the Challenges of Technology-Based Professional Development," *Porta Linguarum* (Special Issue, 2023): 65–80, <https://doi.org/10.30827/portalin.vi2023c.29627>.

81- Afreilyanti and Kuswandono, "Exploring Indonesian EFL Teachers' Agency and Self-Efficacy in Using Artificial Intelligence Tools."

82- Ratih Sulistiya Ningsih, Sudharni, Yohanes Gatot Sutapa Yuliana, and Dwi Riyanti, "Empowering Teachers: AI Tools for Enhancing English Education in Urban Schools," *Journal of English Education Program* 6, no. 1 (2025): 73–82, <https://doi.org/10.26418/jeeep.v6i1.87419>.

83- Abed et al., "A Qualitative Study of English Language Teachers' Perceptions on Teaching English Language through Artificial Intelligence in Public Education in Iraq."; Ghimire and Neupane, "Teachers' Perception and Experiences on Artificial Intelligence (AI) Integration in English Language Teaching and Learning."; Novawan et al. "The New Face of Technology-Enhanced Language Learning (TELL) with Artificial Intelligence (AI)."; Bazriah Sayed Hameed and Harwati Hashim, "Challenges Faced by Teachers in Integrating 4th Industrial Revolution (4IR) Technology in Teaching English as a Second Language (ESL)," *Creative Education* 13 (2022): 1792–1809, <https://doi.org/10.30564/fls.v7i2.7937>.

patterns summarized in Zulkarnain and Yunus⁸⁴ and Selvam and Zakaria⁸⁵. Teachers' professional experience also shapes acceptance, as novice teachers tend to feel less prepared and more hesitant to integrate AI⁸⁶. Previous studies, including Gao et al.⁸⁷, show that practical experience plays a key role in shaping teachers' acceptance of AI. This finding reinforces the need for structured training, as emphasized by Wu⁸⁸ and Zhou et al.⁸⁹.

Indeed, professional development emerges as a particularly influential factor shaping teachers' attitudes toward AI. Structured training significantly enhances teachers' willingness to experiment with AI tools⁹⁰. This aligns with Alshumaimeri and Alshememry⁹¹ and Mulyani et al.⁹², who highlight the role of professional development in overcoming resistance. Idham et al.⁹³ further emphasized that even university lecturers require continuous digital literacy training to use AI effectively.

Beyond training, emotional and practical factors also shape attitudes. Kopuz⁹⁴ found that perceived benefits such as stress reduction and increased job satisfaction strengthened positive attitudes. Kartal⁹⁵ highlighted "digital burnout" as an emotional barrier to AI acceptance, echoing Zhou et al.⁹⁶, who linked rapid technological change to teacher burnout. Anas et al.⁹⁷ similarly noted that teachers may struggle to use AI effectively without adequate support, and that discrepancies between perceived and actual digital competence can stress them and hence hinder adoption.

Regarding the third research question, AI integration often prompts a redefinition of teacher roles, shifting some educators from authoritative knowledge providers to facilitators

<https://doi.org/10.4236/ce.2022.135113>.

84- Zulkarnain and Yunus, "ESL Teachers' Perceptions of AI Integration."

85- Selvam and Zakaria, "A Systematic Literature Review of the Impact of Using Artificial Intelligence."

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87- Gao et al., "Embracing Generative AI in Education: An Experiential Study on Preservice Teachers' Acceptance and Attitudes."

88- Wu, "The Impact of Artificial Intelligence-Assisted Teaching on Teachers' Instructional Development."

89- Zhou, Hashim, and Sulaiman, "Digital Echoes."

90- Metwally and Bin-Hady, "Probing the Necessity and Advantages of AI Integration Training for EFL Educators in Saudi Arabia."; Dehghani and Mashhadi, "Exploring Iranian English as a Foreign Language Teachers' Acceptance of ChatGPT in English Language Teaching."; Abed et al., "A Qualitative Study of English Language Teachers' Perceptions on Teaching English Language through Artificial Intelligence in Public Education in Iraq."; Tümen Akyıldız, "Enhancing or Hindering? AI's Role in Sparking Creativity in Language Teaching."; Eragamreddy, "AI in ELT: ChatGPT's Role in English Language Teaching and Learning."; Zhou and Eslami, "EFL Teachers' Perceptions of the Challenges of Technology-Based Professional Development."

91- Alshumaimeri and Alshememry, "The Extent of AI Applications in EFL Learning and Teaching."

92- Mulyani et al., "Transforming Education: Exploring the Influence of Generative AI on Teaching Performance."

93- Idham, Rauf, and Rajab, "Navigating the Transformative Impact of Artificial Intelligence on English Language Teaching."

94- Kopuz, "English Language Teachers' Insights on the Influence of ChatGPT on Professional Well-Being."

95- Galip Kartal, "English Language Teachers' Perceptions on AI's Role in Alleviating Digital Burnout," in *Perspectives on Digital Burnout in Second Language Acquisition*, edited by A. Kurt (Hershey, PA: IGI Global, 2023), 122–148, <https://doi.org/10.4018/978-1-6684-9246-8.ch006>.

96- Zhou, Hashim, and Sulaiman, "Digital Echoes."

97- Anas, Basri, and Musdariah, "Digital Language Teacher Professional Development from a CALL Perspective."

and technological guides. This aligns with earlier reviews⁹⁸, ⁹⁹

promoting collaboration. Satvati et al.⁹⁹ found that teachers who embraced AI tended to promote learner autonomy and diversity, p

Building on these shifts, concerns over job security, economic pressures, and ¹⁰⁰, and deeper identity

tensions also emerge. Teachers fear job displacement and ethical risks¹⁰¹, echoing concerns about long-term professional relevance¹⁰². Idham et al.¹⁰³ argued that automation necessitates new competencies, while Eragamreddy¹⁰⁴ suggested that teachers must intelligence, and higher-order thinking. Yet, identity renegotiation also opens pathways.

Guan et al.¹⁰⁵ proposed a collaborative AI integration model that preserves teacher agency. Similarly, Le-Khanh et al.¹⁰⁶ showed that teachers assert agency by leveraging AI selectively within their contexts.

Extending these insights, several studies teachers reframe AI as a co-teacher that complements rather than replaces human instruction¹⁰⁷. Emotional coping, continuous professional development, and peer collaboration help teachers adapt. Kopuz¹⁰⁸ found that AI allowed teachers to devote more time to creative tasks, enhancing professional purpose. However, unequal access to AI risks deepening disparities and increasing anxiety¹⁰⁹. Parviz¹¹⁰ noted that many teachers view AI as augmenting their creative input, supporting identity flexibility.

Taken together, these findings suggest that AI challenges traditional markers of authority but simultaneously opens space for renewed pedagogical agency, creativity, and adaptability.

98- Zulkarnain and Yunus, "ESL Teachers' Perceptions of AI Integration."; Alshumaimeri and Alshememry, "The Extent of AI Applications in EFL Learning and Teaching."

99- Nadia Satvati, Jaber Kamali, Fatemeh Safian Boldaji, Muhammad Khodadadi, and Saeid Akhondi, "AI Integration into Language Education and Teacher Identity: An Ecological Perspective," *Language Teaching Research Quarterly* 47 (2025): 1–19, <https://doi.org/10.32038/ltrq.2025.47.01>.

100- Ningsih et al., "Empowering Teachers."; Kartal, "English Language Teachers' Perceptions on AI's Role in Alleviating Digital Burnout."

101- Ningsih et al., "Empowering Teachers."

102- Govindarajan and Christuraj, "Opportunities and Challenges of Using ChatGPT."; Nagaletchimee Annamalai, "Factors Affecting English Language High School Teachers' Switching Intention to ChatGPT: A Push-Pull-Mooring Theory Perspective," *Interactive Learning Environments* 33, no. 2 (2025): 1367–1384, <https://doi.org/10.1080/10494820.2024.2371928>.

103- Idham, Rauf, and Rajab, "Navigating the Transformative Impact of Artificial Intelligence on English Language Teaching."

104- Eragamreddy, "AI in ELT: ChatGPT's Role in English Language Teaching and Learning."

105- Guan et al., "Investigating the Tripartite Interaction among Teachers, Students, and Generative AI in EFL Education."

106- Hoang Le-Khanh, Khoa Do, and Vu Tran-Thanh, "EFL Writing Teachers' Agency in Response to AI Emergence from an Ecological Perspective," in *Innovations in Technologies for Language Teaching and Learning*, edited by P. H. Bui and E. Namaziandošt (Cham: Springer, 2024), 79–94, https://doi.org/10.1007/978-3-031-63447-5_5.

107- Almehmadi, "Exploring the Potential of AI Techniques in Teaching English as a Foreign Language."; Alhusaiyan, "A Systematic Review of Current Trends in Artificial Intelligence in Foreign Language Learning."

108- Kopuz, "English Language Teachers' Insights on the Influence of ChatGPT on Professional Well-Being."

109- Ningsih et al., "Empowering Teachers."; Kartal, "English Language Teachers' Perceptions on AI's Role in Alleviating Digital Burnout."

110- Parviz, "The Double-Edged Sword."

Unlike earlier reviews that focused primarily on technical

identity-related implications (RQ1–RQ3), it becomes clear that several important gaps remain in the literature, limiting

and how teachers' roles and identities evolve over time. In

sibilities and professional identities transform over time, with

served classroom practices. Identity-related changes are also

indirectly through concerns about job security, role shifts, or

perceived digital competence and their real-world implemen-

shape actual AI use. Afreilyanti and Kuswandoni¹¹¹, Mohammadi et al.¹¹², and Anas et al.¹¹³ clearly highlighted

impact of unequal access, as argued by Ningsih et al.¹¹⁴, also re-

teach

bate inequalities between well-resourced and under-resourced schools. Finally, the sociocultural dimensions of AI integration, such a

public narrati

identity negotiation processes, remain largely absent from current analyses.

Conclusion

This scoping review mapped the emerging literature on EFL teachers' attitudes toward AI integration, revealing a landscape characterized by both

While teachers widely recogni

instruction, automate routine tasks

engagement, they also express concern

possible erosion of professional autonomy.

Several critical gaps persist, particularly, teachers emotionally manage AI-driven change, how their professional identities evolve over time, and how AI integration reshapes classroom practice. These gaps are broader limitations in the evidence base, including geographic

111- Afreilyanti and Kuswandoni, "Exploring Indonesian EFL Agency and Self-Efficacy in Using Artificial Intelligence Tools."

112- Mohammadi, Asadi, and Taheri, "Transforming EFL Lesson Planning with 'To Teach AI.'"

113- Anas, Basri, and Musdariah, "Digital Language Teacher Professional Development from a CALL Perspective."

114- Ningsih et al., "Empowering Teachers."

concentration, reliance on self-reported perceptions, and limited classroom-based or longitudinal research. Unequal access to technological infrastructure and inconsistencies between teachers' perceived and actual digital competence further constrain the generalizability and practical applicability of existing findings.

The review underscores that effective and sustainable AI integration requires more than technological adoption, as it also requires supporting teachers as central agents in this transformation. Policies, teacher-training programs, and institutional structures must prioritize professional development, equitable access, and emotional as well as pedagogical support. Strengthening these areas will help ensure that AI enhances, rather than unsettles, the professional identity and instructional impact of EFL educators across diverse contexts. Therefore, AI will not replace teachers, but teachers who are empowered, technologically, pedagogically, and institutionally, will shape how AI transforms language education.

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All data underlying this scoping review are derived from previously published studies. No new datasets were generated or analyzed. All sources included in the review are cited in the reference list.

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