

The Positive Effect and Negative Effect of Artificial Intelligence in English Language Teaching: A Review of Current Trends

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Abstract. Recent advances in technology have significantly transformed the landscape of English teaching and learning. Innovative tools such as chatbots, automated essay grading systems, and specialized pronunciation apps are making lessons more interactive and feedback more immediate and personalized. These digital resources allow schools to reach larger groups of students and to track learners' progress with greater accuracy and efficiency. Despite these benefits, there are still notable challenges. Teachers must constantly adapt to new tools and methods, which can be overwhelming without proper training and ongoing professional development. Furthermore, it is essential for schools to ensure that the use of technology aligns with their educational goals, rather than simply following the latest trends. Technology also has limitations, especially when it comes to assessing natural spoken language and authentic conversational skills. There are concerns about students and teachers becoming overly reliant on technology, which could potentially marginalize the role of skilled educators. Ultimately, the most effective English learning experiences occur when technology is thoughtfully blended with teachers' expertise, creating a balanced and meaningful approach that supports diverse student needs.

1 Introduction

Over the past ten years, English language teaching (ELT) has changed a lot, mainly because of the fast progress in artificial intelligence (AI) technologies. More and more, we're seeing classrooms move away from the usual teacher-led style to more digital, student-centered ways of learning. Technology, especially AI, is now a big part of how lessons are delivered and how students learn. Thanks to advances in things like machine learning, natural language processing, and the latest generative AI, the way people teach and learn languages—and even track their progress—has been transformed.

In the early days, AI in ELT was mostly used for simple grammar and vocabulary exercises, with some basic feedback. But as the technology has improved, it now powers smart chatbots, automatic test marking, pronunciation helpers, and tools that can create custom learning materials. These new tools are especially useful in colleges and high schools

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where there's a big need for lessons that are flexible, personal, and interactive. The move towards using AI isn't just about the technology itself—it's also driven by bigger trends in education, like the need for lifelong learning, the spread of English as a global language, and the shift to online platforms (especially after COVID-19). Because of all this, AI has become a symbol of innovation in ELT, catching the eye of teachers, researchers, and policymakers everywhere.

However, research in this area doesn't always agree. While many studies highlight the benefits of AI—like giving fast, objective feedback, making lessons more engaging, and improving assessment—there are still lots of questions. For example, can AI really understand and respond to the full range of human communication, including things like tone, emotion, and body language? There are also concerns about ethics, data privacy, how much freedom teachers have, and whether we might end up relying too much on technology. Another issue is that a lot of the research comes from a tech or computer science angle, rather than focusing on what actually works in real classrooms. This can create a gap between what's possible with technology and what teachers and students really need.

Given all this, this review aims to pull together the latest research and offer a balanced look at what AI is actually doing in English language teaching. More specifically, the author will look at how AI affects language skills, testing, student motivation, and teachers' attitudes. The goal is to show where things stand, highlight the main trends and challenges, and suggest some practical ideas for using AI in an effective and ethical way in ELT. In this way, this review aspires to offer useful advice to teachers, instructional designers, policymakers, and researchers operating at the rapidly evolving boundary of AI and language teaching.

2 Common conceptions and approaches to AI in ELT

Artificial Intelligence (AI) has rapidly become one of the most influential forces reshaping the landscape of English Language Teaching (ELT). The integration of AI is not only a technological innovation but also a pedagogical shift, influencing how language is taught, learned, and assessed. Drawing on recent systematic reviews, empirical studies, and theoretical analyses, this section explores the major conceptualizations and practical approaches to AI in ELT, while also critically assessing their implications, advantages, and limitations [1].

2.1 AI as an automated evaluator: Objectivity and efficiency in assessment

One of the most common ways AI is used in English teaching is for automatic grading, especially when it comes to writing and speaking tests. Tools like automated essay scorers (for example, ETS's Criterion or Pearson's WriteToLearn) use technologies such as natural language processing and machine learning to quickly and consistently grade large numbers of student essays and speeches [2]. For speaking, systems that use automatic speech recognition (ASR) have also become pretty popular—they can give students instant feedback on their pronunciation and fluency, which is handy when you have lots of learners [3, 4].

Research shows that these AI grading tools can be just as fair—or sometimes even fairer—than human graders, especially when checking things like grammar, vocabulary, or how clear your pronunciation is. Since AI can grade quickly, teachers can give more regular feedback without burning out, and students get to know right away what they need to work on.

But there are still some things AI isn't so good at. For example, it's hard for a computer to really judge how creative a piece of writing is, how well ideas flow together, whether someone uses language appropriately in different situations, or how much emotion comes through [5]. Because of these limits, human teachers are still needed for a well-rounded and

meaningful assessment. More and more, people suggest using a mix of both—letting AI handle the routine stuff and letting teachers focus on the things that need more human judgment and empathy.

2.2 AI as an interactive tutor: Personalization and learner autonomy

AI isn't just about grading, though. Another big role is acting as a digital tutor or conversation partner. Chatbots, virtual teachers, and smart learning apps can mimic real conversations, let students practice one-on-one, and adjust lessons to fit what each learner needs [6]. These systems are designed to foster learner autonomy and motivation by enabling students to practice English in a low-stress, self-paced environment [7].

Empirical studies demonstrate that AI-powered tutors can boost learner engagement, confidence, and willingness to communicate, particularly in oral skills. Pronunciation tutors leveraging ASR provide immediate, targeted feedback, helping students refine their accent and fluency. The integration of personalized prompts and adaptive difficulty further increases the relevance and challenge of learning tasks [8].

Yet, the pedagogical effectiveness of AI tutors depends heavily on instructional design and teacher mediation. Without thoughtful integration into the curriculum, chatbots and virtual tutors risk being underused or may even distract from learning goals. Teachers play a crucial role in scaffolding AI use, contextualizing feedback, and ensuring that technology aligns with broader communicative objectives [9, 10].

2.3 AI as a resource generator and teaching assistant

Beyond direct interaction with students, AI is also widely used as a resource generator for teachers. Large language models (LLMs) such as ChatGPT have transformed lesson planning, materials development, and the creation of differentiated exercises. AI can quickly generate quizzes, comprehension questions, and even adapt reading passages to different levels of learner proficiency.

Teachers increasingly value these tools for reducing workload and providing fresh ideas, especially when time or resources are limited. Nevertheless, concerns persist regarding the reliability, appropriateness, and cultural sensitivity of AI-generated content, as well as the risk of over-reliance on automated suggestions. For AI to serve as a truly effective teaching assistant, teachers must develop critical digital literacy skills and remain actively involved in material selection and customization.

2.4 AI and learner motivation: Gamification and engagement

The motivational affordances of AI in ELT are increasingly recognized. Many AI-powered applications incorporate elements of gamification—such as badges, leaderboards, and interactive challenges—to boost learner engagement and persistence. Immediate, personalized feedback from AI systems is shown to enhance learners' sense of competence and autonomy, which is vital for sustaining long-term motivation.

However, researchers caution that excessive gamification or extrinsic rewards can undermine intrinsic motivation if not balanced with meaningful, communicative learning tasks. The most effective AI-based motivational strategies are those that support self-regulated learning and align with authentic language use.

2.5 Ethical and social considerations: Agency, privacy, and equity

As AI becomes more deeply embedded in ELT, ethical, social, and professional considerations come to the forefront. Key concerns include algorithmic bias, data privacy, transparency, the potential for academic dishonesty, and the risk of de-skilling or marginalizing teachers. For example, automated scoring systems may inadvertently perpetuate biases present in their training data, while data-intensive applications raise questions about student privacy and consent.

Moreover, the literature highlights the importance of teacher agency and professional identity. AI should be positioned as a complement, not a replacement, to human expertise. Teachers must remain central to decisions about technology adoption, curriculum integration, and classroom practice, and their ongoing professional development in AI literacy is essential.

Finally, questions of equity and access persist. While AI has the potential to democratize high-quality language learning, disparities in digital infrastructure and teacher training can exacerbate existing educational inequalities [11]. Policymakers and institutions must ensure that AI resources are equitably distributed and that all learners have opportunities to benefit from technological advancements.

2.6 The need for pedagogical frameworks and cross-disciplinary collaboration

Despite the rapid adoption of AI in ELT, much existing research remains technology-driven, with insufficient attention to pedagogical frameworks and classroom realities. Cross-disciplinary collaboration between educators, linguists, technologists, and policymakers is necessary to bridge the gap between innovation and effective practice. Future research should prioritize classroom-based, teacher-led studies and focus on how AI can support not only language proficiency, but also critical thinking, intercultural competence, and learner autonomy.

3 Key research trends and findings

The last few years have witnessed a boom in scholarly interest in the applications and impacts of artificial intelligence in English language teaching (ELT). Summarizing evidence in systematic reviews, empirical studies, and classroom-based investigations, several emerging trends and findings have emerged that highlight both the potential and complexity of integration with AI.

Firstly, the implementation of AI in ELT continues to gather momentum, especially in higher education and technologically advanced regions. Systematic reviews and large-scale studies indicate increasing diversity of AI-based tools deployed in language classrooms, from automated essay graders to speech recognition systems and more intelligent chatbots. Besides improving testing efficiency and fairness, these technologies are also facilitating new modalities of interactive and adaptive learning.

Second, much research focuses on the effectiveness of AI-based evaluation. Automated markers have been shown to evaluate consistently lower-order language skills, such as grammar, vocabulary, and pronunciation, with accuracy and speed. This is especially valued for formative evaluation, where prompt feedback can accelerate learning and increase learner engagement. However, research also shows that AI is less competent at evaluating higher-order language abilities, such as discourse coherence, creativity, and pragmatic ability, for which human evaluation remains inevitable.

Third, AI-powered interactive tutors and chatbots are becoming more widely accepted as aids to learner autonomy, motivation, and speaking proficiency. Research shows that these systems can deliver more individualized, learner-centered learning experiences and reduce

learner anxiety in communicative tasks. Pronunciation tutors, in particular, have been shown to improve accuracy and motivation by using gamified feedback.

Fourth, teacher experiences and perceptions are a new area of research. Teachers recognize the potential of AI in generating resources, reducing workload, and involving the classroom but also have concerns over technology reliance, academic integrity, and the need for professional training. Teachers' digital literacy and their ability to critically integrate AI into pedagogic practice are seen as crucial in assuring effective implementation.

Fifth, ethical, equity, and access issues are more prominent in the literature. Algorithmic bias, data privacy, and increasing education inequalities are areas of debate. Research highlights that there is a need for open policies and inclusive policies to ensure that AI benefits all learners and not just those from high-provision contexts.

Finally, there is a recognized gap between technology development and pedagogical integration. A lot of the research on AI in English language teaching has been driven by technology itself, rather than by what actually happens in real classrooms. There's still a noticeable lack of studies led by teachers that focus on how students learn and what really works for them. More and more experts are pointing out the need for deeper collaboration across different fields, as well as the importance of developing solid teaching frameworks that make sense for integrating AI into both lessons and assessment.

All in all, while technology brings plenty of new ideas and directions to how English is taught, making it work in practice depends on combining the strengths of smart tools with genuine teaching expertise, professional autonomy, and a firm commitment to ethics. Ongoing research—especially work grounded in classroom realities—will be essential if we want to move past current challenges and make sure AI genuinely helps all learners achieve their language goals in a fair and effective way.

4 Power dynamics and the role of human agency

The worldwide expansion of AI in English language teaching isn't just about introducing new technology—it's also shaking up the balance of power among teachers, technology, and educational institutions. When AI is rolled out as a closed, fully automated system, it can put rigid rules in place and push everyone toward a one-size-fits-all approach. In these scenarios, teachers may end up feeling more like tech supervisors than the creative professionals they are, with less freedom to adapt lessons to what their students actually need.

But it doesn't have to be that way. When teachers are involved in the process—helping decide how AI tools are developed and used—technology can genuinely become a partner in teaching. In these cases, AI can support teachers' goals, spark new ideas, and help make classrooms more student-centered and creative.

At the heart of this shift is teacher agency. Teachers know their classrooms better than anyone, so they need the power to question, tweak, and even reimagine how AI gets used. For this to happen, ongoing training, digital literacy, and real support from schools are vital, so teachers can stay in the driver's seat when it comes to making decisions about curriculum and day-to-day teaching. It's also up to schools and education leaders to treat teachers as co-designers of AI in education, not just as people who use whatever system is handed to them.

Ultimately, the best way to bring AI into English teaching is to find a healthy balance between technological innovation and human expertise. When teachers and AI work together—rather than one replacing the other—students benefit from both the efficiency of technology and the empathy, flexibility, and insight that only experienced educators can offer. That's the kind of partnership that can really move language learning forward.

5 Conclusion

Bringing AI into English language learning is honestly pretty thrilling, but if I'm being real, it can also feel a bit overwhelming. There's a lot of talk about how AI might totally change how we teach and learn—and there's some truth to that. We've got automated grading, interactive lessons, personalized study tools, and all sorts of apps that can get students more engaged than ever before. With these new tools, teachers can actually tweak their lessons to match what each student needs, and maybe even free up some time to try new things or just keep on top of their work. Like, you can get instant, unbiased feedback, and tools like chatbots or virtual tutors can really bring classes to life and give students more of the spotlight. Plus, there are now planning tools that help teachers organize and run their lessons in totally new ways.

But as great as all that sounds, it's easy to get caught up in the excitement and forget about the real challenges. There are some things we just can't ignore. For starters, AI still isn't great at picking up on the more subtle parts of language—like nuance, creativity, or those tricky bits of real communication. There's also the risk of depending on technology a little too much, not to mention ongoing worries about things like data privacy and keeping academic standards high. No matter how smart the tech gets, teachers are still the heart of the classroom. It's on us to make sure these tools are actually helping students, not just taking away the human side that really makes learning work. That's why teachers need ongoing support—not just to learn how to use these tools, but also to figure out what to actually do with the feedback and data AI gives us, and how to turn that into lessons that really put students first.

On a bigger scale, there's a lot for schools and decision-makers to think about too. We need clear and fair rules, so everyone can actually benefit from AI tools, education stays high-quality, and student info is kept safe. It's not just about buying the newest gadgets—schools have to invest in the tech and keep supporting teachers as they figure out how to really use it in day-to-day teaching.

Looking ahead, we definitely need more long-term research to see what's actually happening in classrooms—both for teachers and students—when AI is part of the picture. We have to build strong teaching approaches, use data responsibly, and make sure no one's left out as things keep changing.

In the end, there's no question that AI is making waves in the world of English language teaching. But to really make the most of what it offers, we need to be intentional about blending technology with the experience and insight that good teachers already have. AI's real value will only shine when it's used to amplify—not replace—the creativity, empathy, and critical thinking that teachers bring to the classroom. Striking that balance is what's going to define the future of English teaching with AI.

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