
Enhancing Learner Autonomy through AI Assisted Language Learning in the ELT Classroom: A 21st Century Perspective

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Abstract

The integration of Artificial Intelligence (AI) into English Language Teaching (ELT) has initiated a paradigm shift toward learner centered pedagogies that prioritize autonomy, personalization and lifelong learning. This paper critically explores the role of AI assisted technologies such as intelligent tutoring systems, chatbots, automated writing evaluation tools and adaptive learning platforms in fostering learner autonomy. Drawing upon theoretical frameworks including Constructivism, Self-Determination Theory and Connectivism, the study examines how AI facilitates cognitive, behavioral, emotional and social dimensions of autonomy. Through an extensive analysis of contemporary research and detailed classroom based examples, the paper demonstrates that AI enables learners to set goals, monitor progress and engage in reflective practices. Furthermore, it highlights how AI driven environments enhance motivation, reduce anxiety and promote independent learning. The study also addresses challenges such as digital inequality, ethical concerns and over reliance on technology, offering pedagogical strategies for effective implementation. Ultimately, the paper argues that AI assisted ELT not only enhances language proficiency but also equips learners with essential 21st century skills by preparing them to thrive in a digitally interconnected global society.

Keywords: learner autonomy, artificial intelligence, ELT, adaptive learning, self-directed learning, digital pedagogy, metacognition

The 21st century has witnessed unprecedented technological advancements with Artificial Intelligence (AI) emerging as one of the most transformative forces in education. In the field of English Language Teaching (ELT), AI has redefined traditional pedagogical practices, shifting the focus from teacher-centered instruction to learner-centered, technology-enhanced learning environments. This shift aligns

with the growing emphasis on learner autonomy, a concept that has become central to contemporary language education.

Learner autonomy, as defined by Holec, is “the ability to take charge of one’s own learning” (3). This includes setting learning objectives, selecting appropriate strategies, monitoring progress and evaluating outcomes. In traditional classrooms, autonomy was often limited by rigid curricula and teacher-controlled instruction. However, AI technologies have expanded the possibilities for autonomous learning by providing learners with personalized, flexible and interactive learning experiences.

The importance of learner autonomy in ELT cannot be overstated. Autonomous learners are more motivated, engaged and capable of adapting to new learning contexts. They are better equipped to handle the complexities of language acquisition and are more likely to achieve long term success. AI supports this development by offering tools that facilitate independent learning, immediate feedback and continuous practice.

For instance, in a college-level ELT classroom, students using AI-based writing tools demonstrated significant improvement in their writing skills. By receiving instant feedback on grammar, vocabulary and coherence, they were able to revise their work independently, reducing their reliance on teachers. Similarly, AI chatbots enabled students to practice conversational English in a low-anxiety environment, enhancing their fluency and confidence.

This paper aims to explore the role of AI in promoting learner autonomy in ELT, supported by theoretical frameworks, empirical research and practical classroom examples. It also examines the challenges associated with AI integration and provides recommendations for effective implementation.

Theoretical Framework

The integration of AI in ELT can be understood through several theoretical perspectives that provide a foundation for analyzing its impact on learner autonomy.

Constructivism posits that learning is an active process in which learners construct knowledge through interaction and experience. According to Vygotsky, learning occurs within the Zone of Proximal Development where learners can achieve higher levels of understanding with appropriate support. AI technologies serve as dynamic scaffolding tools, offering personalized feedback and guidance that adapts to individual learner needs. For example, in a classroom activity, students used AI based

grammar tools to identify and correct errors in their writing. This process encouraged active engagement and reflection, key principles of constructivist learning.

According to Self-Determination Theory, Deci and Ryan emphasize the importance of autonomy, competence and relatedness in motivation. AI supported learning environments address these needs by allowing learners to control their learning pace (autonomy), providing immediate feedback (competence) and facilitating interaction through digital platforms (relatedness). In one case, students using an adaptive learning platform reported increased motivation due to the ability to track their progress and achieve personalized goals.

In Connectivism, Siemens highlights the role of digital networks in learning. In AI-mediated environments, learners connect with a wide range of resources, tools and communities. For instance, students participating in online discussion forums used AI tools to analyze and respond to peer contributions, enhancing both their language skills and digital literacy.

These theoretical frameworks collectively explain how AI supports learner autonomy by promoting active engagement, intrinsic motivation and networked learning.

Dimensions of Learner Autonomy in AI-Mediated Learning

Learner autonomy is a multidimensional construct that encompasses cognitive, behavioral, emotional and social aspects. AI technologies contribute to each of these dimensions in significant ways.

Cognitive Autonomy

Cognitive autonomy involves the ability to think critically, analyze information and make informed decisions about learning. AI tools such as automated writing evaluators and grammar checkers enhance this dimension by providing detailed feedback that encourages reflection and self-correction. For example, in a writing class, students used AI tools to revise essays multiple times. They identified recurring errors and developed strategies to avoid them and demonstrating increased metacognitive awareness.

Behavioral Autonomy

Behavioral autonomy refers to learners' ability to manage their learning activities independently. AI platforms enable learners to set goals, track progress and adjust strategies based on performance data. In one classroom, students preparing for language proficiency exams used AI based apps to schedule daily practice sessions.

They monitored their progress through analytics dashboards which motivated them to maintain consistency.

Emotional Autonomy

Emotional autonomy involves managing emotions and maintaining motivation. AI tools create a supportive and non-threatening learning environment, reducing anxiety and increasing confidence. For instance, shy students who were reluctant to speak in class practiced pronunciation using AI speech recognition tools. Over time, they became more confident and actively participated in classroom discussions.

Social Autonomy

Social autonomy emphasizes interaction and collaboration. AI enabled platforms facilitate communication through discussion forums, collaborative projects and chatbots. In a group activity, students used AI tools to co-create presentations on cultural topics. They collaborated, shared ideas and provided feedback and enhanced their communicative competence.

AI Tools and Their Pedagogical Affordances

AI technologies offer a wide range of tools that support language learning and autonomy.

Intelligent tutoring systems provide personalized instruction based on learner performance. For example, a teacher assigned grammar exercises through an AI platform that adjusted difficulty levels according to student responses.

AI chatbots simulate real-life conversations, allowing learners to practice speaking and writing skills. In one activity, students interacted with chatbots to role-play situations such as job interviews and travel scenarios.

Automated writing evaluation tools help learners improve writing skills by providing instant feedback. Students in a writing course submitted multiple drafts of essays, refining their work based on AI suggestions.

Speech recognition tools assist in pronunciation practice by analyzing speech and providing corrective feedback. Students recorded their speech and compared it with AI-generated models, leading to noticeable improvement.

Adaptive learning platforms personalize content and pacing, ensuring that learners remain engaged and challenged.

Pedagogical Strategies for Integrating AI in ELT

Effective integration of AI requires thoughtful pedagogical strategies. One approach is to incorporate AI assisted writing tasks where students use AI tools to draft and revise essays. Teachers can guide students to reflect on feedback and identify patterns in their errors.

Task-based learning using AI is another effective strategy. For example, students can create podcasts on social issues, using AI tools for script writing and editing. This integrates multiple language skills and promotes autonomy.

Project-based learning can also be enhanced with AI. In one case, students created video presentations using AI-assisted editing tools. They independently researched topics, organized content and presented their work.

Reflective practices such as maintaining digital portfolios encourage learners to evaluate their progress and set future goals.

Challenges and Considerations

Despite its advantages, AI integration presents several challenges. The digital divide limits access to technology for some learners, affecting their ability to benefit from AI tools. Ethical concerns such as data privacy and academic integrity must also be addressed.

Over reliance on AI is another concern. Learners may depend on automated tools without understanding underlying concepts. Teachers must encourage critical engagement with AI feedback.

Teacher training is essential for effective implementation. Educators need to develop digital literacy skills and understand how to integrate AI into their teaching practices.

Conclusion

The integration of Artificial Intelligence into English Language Teaching represents a significant advancement in promoting learner autonomy. By providing personalized, interactive and flexible learning environments, AI empowers learners to take control of their learning processes. The inclusion of real classroom examples demonstrates the practical application of AI in fostering autonomy.

Grounded in strong theoretical frameworks and supported by contemporary research, AI-assisted ELT offers a promising pathway for developing autonomous learners. While challenges remain, careful implementation and ethical considerations can

ensure that AI enhances the learning experience. Ultimately, AI has the potential to transform language education to prepare learners for success in a rapidly evolving digital world.

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