



ARTIFICIAL INTELLIGENCE IN TEACHING ENGLISH TO PRIMARY SCHOOL LEARNERS WITH PEDAGOGICAL PERSPECTIVE

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Annotation: The incorporation of artificial intelligence (AI) into early foreign language education represents a significant methodological shift from standardized instruction toward adaptive and learner-centered environments. This paper critically examines how AI-driven tools can support English language acquisition among primary school learners. Unlike traditional approaches, AI enables continuous personalization, real-time interaction, and data-informed pedagogical decisions. The study proposes that AI not only enhances linguistic competence but also reshapes the roles of both teacher and learner within the educational process. At the same time, it highlights practical and ethical constraints that must be addressed to ensure effective implementation.

Keywords: Artificial Intelligence (AI), Primary Education, English Language Teaching (ELT), Young Learners.

Introduction

Early-stage language learning plays a decisive role in shaping learners' future communicative competence. At the primary level, children demonstrate high sensitivity to phonological input, strong imitative ability, and natural curiosity. However, conventional teaching methods often rely on uniform instruction that does not adequately reflect individual learning differences. The emergence of artificial intelligence offers an alternative paradigm. Rather than delivering identical content to all learners, AI-based systems analyze behavioral and performance data to generate individualized learning pathways. In this sense, AI transforms teaching from a fixed process into a dynamic and responsive system. This paper argues that the integration of AI into primary English language teaching is not merely a technological upgrade but a pedagogical transformation that requires rethinking instructional design, assessment strategies, and classroom interaction.

Learner-Centered Knowledge Construction- From a constructivist perspective, learning occurs when individuals actively engage with information and integrate it into existing cognitive structures. AI tools facilitate this process



by creating environments where learners do not simply receive input but interact with it. [1]

For instance, instead of memorizing vocabulary lists, learners encounter words in interactive contexts, make choices, and receive immediate system responses. This continuous interaction strengthens retention and comprehension.

Adaptive Support and Cognitive Scaffolding- a key pedagogical advantage of AI lies in its ability to provide differentiated support. Unlike static materials, AI systems adjust task complexity based on learner performance. When a student encounters difficulty, the system offers guided assistance rather than simply indicating an error.

Such adaptive scaffolding ensures that learners remain within an optimal challenge range, preventing both frustration and disengagement.

Communication-Oriented Learning- Language acquisition is most effective when learners use language as a tool for meaning-making rather than as an abstract system of rules. AI-driven environments simulate communicative situations where learners must interpret, respond, and produce language. [2]

These environments create opportunities for repeated practice without the social pressure often present in traditional classrooms, which is particularly beneficial for young learners.

AI systems continuously monitor learner input and adjust instructional materials accordingly. This includes modifying:

- lexical difficulty
- sentence structure complexity
- task sequence [3]

As a result, each learner follows a unique progression path rather than a standardized curriculum. One of the most transformative features of AI is its capacity to provide immediate feedback. In traditional settings, feedback is often delayed or limited due to time constraints. AI eliminates this gap by instantly analyzing responses and offering corrections. Importantly, effective AI feedback is not limited to indicating errors; it also explains why a response is incorrect and suggests alternative forms. [4]

AI-based speech analysis tools allow learners to practice pronunciation in a low-risk environment. The system evaluates phonetic accuracy and provides targeted feedback, enabling learners to refine their speech through repetition. This process contributes to the gradual development of fluency and confidence. AI systems collect and analyze detailed learning data, including response time, accuracy, and error patterns. This information can be used to: [5]

- identify learning gaps
- predict potential difficulties



- inform instructional decisions

Such data-driven insights support more effective teaching strategies.

Vocabulary. Vocabulary learning is enhanced through contextual exposure and repeated interaction. AI tools present words in varied contexts, reinforcing meaning and usage. [6]

Listening. Adaptive audio materials enable learners to engage with language input at an appropriate level of difficulty. Features such as adjustable speed and interactive comprehension checks support gradual improvement.

Speaking. AI-mediated speaking activities reduce anxiety by allowing learners to practice independently. The absence of peer judgment encourages experimentation and risk-taking.

Reading. AI systems provide texts that are calibrated to the learner's proficiency level, ensuring that reading tasks remain challenging yet achievable.

Writing. Writing tools guide learners through sentence formation and organization, offering suggestions that help improve clarity and correctness. [7]

Traditional assessment methods often provide a limited snapshot of learner performance. In contrast, AI enables continuous and multidimensional evaluation. Learner progress is tracked over time, allowing for a more comprehensive understanding of development. [8]

Assessment tasks are dynamically adjusted, ensuring that results accurately reflect learner ability. Instant feedback reinforces learning by addressing errors at the moment they occur.

The integration of AI introduces several key benefits:

1. instruction becomes individualized rather than uniform;
2. learners remain actively engaged through interactive tasks;
3. teachers can focus on facilitation rather than routine correction;
4. learning extends beyond classroom boundaries; [9]

These advantages contribute to more efficient and meaningful language acquisition. Despite its potential, AI integration must be approached critically. [10]

1. Infrastructure Constraints- Access to technology remains uneven, which may limit implementation.

2. Pedagogical Readiness- Effective use of AI requires teachers to develop new competencies.

3. Ethical Responsibility- The collection and use of learner data raise important privacy concerns. [11]

4. Human Interaction Factor- Language learning is inherently social; therefore, AI should complement rather than replace human communication. To achieve meaningful outcomes, AI should be integrated within a balanced



pedagogical framework. Teachers should:

- combine AI tools with interactive classroom activities
- monitor learner progress using AI-generated data
- ensure that technology supports, rather than dominates, instruction

Further development of AI in education is likely to focus on:

- more natural conversational interaction
- emotionally responsive systems
- deeper personalization

These advancements will continue to reshape language education. [12]

Conclusion. Artificial intelligence represents a powerful tool for enhancing English language teaching at the primary level. By enabling adaptive learning, immediate feedback, and interactive engagement, AI addresses many limitations of traditional instruction. However, its effectiveness depends on thoughtful implementation and the continued involvement of educators. A balanced approach that integrates technological innovation with human guidance offers the most promising path forward.

LITERATURE

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