

4. Mayer R. E., Moreno R. Nine ways to reduce cognitive load in multimedia learning, *Educational Psychologist*. 2003. 38. P. 43-52. http://dx.doi.org/10.1207/S15326985EP3801_6
5. Sweller J. Element interactivity and intrinsic, extraneous and germane cognitive load. *Educational Psychology Review*. 2010. 22. P.123-138.<http://dx.doi.org/10.1007/s10648-010-9128-5>
6. Taber K. S. Scaffolding learning: principles for effective teaching and the design of classroom resources. In: M. Abend (Ed.). *Effective Teaching and Learning: Perspectives, strategies and implementation*. P.1-43. New York: Nova Science Publishers, 2018. Available from: https://www.researchgate.net/publication/327833000_Scaffolding_learning_Principles_for_effective_teaching_and_the_design_of_classroom_resources [accessed Oct 10 2025].
7. Zhang Y. Cooperative language learning and foreign language learning and teaching. *Journal of Language Teaching and Research*. 2010. 1(1). P. 81-83. <https://doi.org/10.4304/jltr.1.1.81-83>

AI Literacy for Beginner and Elementary Second Language Learners: A Pedagogical Framework

Natalia Opryshko

PhD in Philology

Associate Professor of the Department of Language Training

Kharkiv National Automobile and Highway University

Kharkiv, Ukraine

e-mail: nataopryshko21.11@gmail.com

The proliferation of AI-powered tools like chatbots, speech recognition software, and adaptive learning platforms has fundamentally reshaped the landscape of second language education. For beginner and elementary learners, who are grappling with foundational vocabulary and grammar, these tools offer an accessible and non-judgmental environment for practice. However, simply providing access to these technologies is insufficient. Without a solid understanding of how AI works, its limitations, and its ethical implications, learners risk developing a superficial reliance on technology, hindering the development of critical thinking and genuine communicative competence.

AI literacy is no longer a fringe topic but an essential skill for the 21st century. In language education, this means more than just knowing how to type a prompt into an AI-powered chat-bot's interface. It encompasses a full set of learner's abilities, including understanding the basic mechanics of AI and its role in language learning;

evaluating the accuracy, bias, and reliability of AI-generated content; utilizing AI tools strategically to meet personal learning goals; addressing the ethical considerations of data privacy and responsible use.

This paper focuses on the unique context of A1 and A2 learners, as defined by the Common European Framework of Reference for Languages (CEFR). These learners are at a critical stage where they need to build confidence and a solid foundation in all four skills: listening, speaking, reading, and writing.

Primarily, it is important to focus on the role of AI-powered tools in the initial stage of a second language learning.

It is common knowledge that AI tools provide several pedagogical advantages tailored to the needs of A1 and A2 learners. Among them, we consider the possibility of personalized and adaptive practice: AI can create personalized learning paths based on a student's individual pace and proficiency level. Adaptive learning platforms, for instance, can identify specific grammar or vocabulary gaps and provide targeted exercises, ensuring learners aren't overwhelmed by content that's too advanced. One more benefit is low-stakes conversational practice: for beginners, the fear of making mistakes in front of peers or a professor can be a significant barrier to speaking. AI chatbots and virtual tutors offer a safe, judgment-free space for students to practice simple dialogues, role-plays, and pronunciation without anxiety. They provide instant feedback on grammar and fluency, allowing for repeated practice.

Various programmes which work on AI algorithms are able to provide pronunciation and fluency support, e.g. AI-powered speech recognition technology can analyze a learner's pronunciation and provide immediate feedback, identifying specific sounds or intonation patterns that need improvement. This is particularly valuable for beginners who are developing their phonetic awareness. Not to mention vocabulary and grammar scaffolding: AI can generate customized vocabulary lists, create gap-fill exercises, and simplify complex texts to a learner's level. It can also provide context-specific examples and explanations for grammatical rules, making abstract concepts more concrete.

At the same time, developing AI literacy in beginner language learners requires a structured, intentional approach. American researchers C. Chan and Y. Ka have proposed a framework centered on three core pillars: “technical and operational competence; critical thinking and evaluation; ethical and responsible use” [1, p.30].

The first pillar focuses on the foundational skills required to use AI tools effectively. It's the "how-to" of AI literacy. It must be arranged in two basic stages. At the stage of explicit instruction educators must explicitly teach students how to interact with AI tools which includes basic skills like prompt engineering — the art of crafting clear and effective instructions to get a desired output (e.g., a teacher might show students how to ask an AI to "write a short dialogue between two friends greeting each other in English/Ukrainian using only A1-level vocabulary"). During the tool selection students should be guided to choose appropriate tools for their learning goals. While a general-purpose AI chatbot like ChatGPT can be useful, beginner-specific apps like Duolingo, Babbel or Character.ai often provide a more structured and gamified experience that is better suited for their level.

Critical thinking and evaluation addresses the cognitive skills necessary to assess the quality and reliability of AI-generated content. Learners must understand that AI is a tool, not an infallible source. The latter leads to a necessity of both verification (students must be encouraged to cross-reference AI-generated information with traditional sources, such as dictionaries, textbooks, or authentic materials) and recognizing limitations and bias (teachers must explain that AI models are trained on vast datasets and can sometimes produce inaccurate, unnatural, or culturally insensitive language, thus by comparing AI outputs with human-generated examples, students learn to identify the nuances that AI might miss, such as idiomatic expressions or cultural context).

At last, teaching about ethical and responsible use addresses the societal and personal implications of using AI, a “crucial component often overlooked in language learning contexts” [2, p. 68]. The most important of these include data privacy (students should know what data is collected by AI platforms and why it is important

to protect their personal information) and academic integrity (clear classroom policies must be established in the classroom on the appropriate use of AI for assignments; for beginners, this might mean using AI for generating practice materials but not for completing graded work since the goal is to encourage the use of AI as a learning aid, not a substitute for learning itself).

As we can see, integrating AI literacy into beginner and elementary second language education is not merely a technological trend; it is a pedagogical imperative. By equipping students with the skills to use AI responsibly and critically, we empower them to become autonomous learners who can leverage technology to accelerate their language acquisition. The proposed framework, which emphasizes technical competence, critical thinking, and ethical awareness, provides a roadmap for educators to navigate this new landscape. Future research should explore the long-term impact of AI literacy on learner autonomy and communicative competence at the beginner level, as well as the development of standardized curricula and assessment tools for AI literacy in language education.

References:

1. Chan C., Ka Y. A comprehensive AI policy education framework for university teaching and learning. *International Journal of Educational Technology in Higher Education*. 20 (1) 38. 2023. P. 25-42
2. Opryshko N. Using AI-powered tools as a method to simplify language training in times of crisis: ethical aspect. *Викладання мов у закладах вищої освіти на сучасному етапі. Міжпредметні зв'язки: Тези XXVII Міжнародної наук.-практ. конф. (5–6 червня 2025 року, м. Харків, Україна)*. 2025. P. 67-69