Research Synthesis in Applied Linguistics 2026

ARTIFICIAL INTELLIGENCE IN LANGUAGE LEARNING
A TWENTY-YEAR SCOPING REVIEW OF APPLICATIONS, RESEARCH METHODS, AND OUTCOMES

Yijen Wang, Zuyang Jerrie Zhang, Hao Zhou

Chatbots • Productive Skills • Affective Learning Outcomes
Mixed Methods Research • Publication Bias

What Can I Learn?

What AI tools are being studied?

What skills and outcomes get attention?

Take a critical stance toward overly positive claims about AI effectiveness.

What Evidence is Summarised ? What Does it Find?

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Empirical Studies
published between **2019 and 2024**.

Types of AI technologies used (e.g., chatbots, commercial tools)

Research methods (quantitative, qualitative, mixed methods)

Target language skills and learning outcomes

Learner populations, learning contexts, and target languages

Most studies **focus on writing and speaking**, with far less attention to listening and reading.

Research primarily **focuses on university students, formal classrooms, and English learning**, limiting generalisability.

- Research has shifted from **rule-based systems** to advanced AI applications, especially **chatbots.**
- There is **growing interest in affective outcomes,** suggesting AI is not only about performance but also learner emotions and engagement.

How Can I Use the Findings?

Focus on Productive Skills

Chatbots and writing assistants have the **strongest evidence**, so start there.

Watch the Whole Learner

Emotional responses — motivation, confidence, anxiety — **matter as much as performance**.

Experiment with New Areas

AI support for listening or reading, informal learning, and non -English languages are **underresearched areas**.