



## THE IMPACT OF ARTIFICIAL INTELLIGENCE ON LANGUAGE LEARNING: (SOUTH KOREA AS A MODEL FOR DIGITAL EDUCATION)

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<https://doi.org/10.5281/zenodo.18628675>

### ARTICLE INFO

Received: 06<sup>th</sup> February 2026

Accepted: 12<sup>th</sup> February 2026

Online: 13<sup>th</sup> February 2026

### KEYWORDS

*Artificial Intelligence (AI), language learning, digital education, South Korea, AI-based language learning, adaptive learning systems, intelligent tutoring systems, speech recognition technology, chatbot-assisted learning, educational technology, learner autonomy, personalized instruction, digital infrastructure, AI policy in education, soft power in education, technology-enhanced language learning (TELL), digital inequality, ethical issues in AI, higher education digital transformation, smart learning initiatives.*

### Introduction

The rapid development of Artificial Intelligence has significantly influenced the field of education, particularly language learning. AI-based tools such as intelligent tutoring systems, chatbots, speech recognition software, and adaptive learning platforms have changed how languages are taught and

### ABSTRACT

*Artificial Intelligence (AI) has increasingly transformed language learning by offering personalized instruction, adaptive feedback, and flexible learning environments. This article examines the impact of AI on language learning within the context of South Korea, a country widely recognized for its advanced digital education infrastructure. Using a conceptual and policy-based analysis combined with a mini case study approach, the study explores how AI-supported tools are integrated into language education and how these practices contribute to South Korea's role as a model for digital education. The findings indicate that AI enhances learner autonomy, efficiency, and accessibility, while also presenting challenges related to digital inequality and ethical concerns. The study contributes to the growing literature on AI in education and provides implications for global education policy and practice.*

learned. These technologies enable personalized learning experiences and provide immediate feedback, which is especially valuable in second and foreign language acquisition (Li, 2022).

While much of the existing research on AI in language learning focuses on Western educational contexts, Asian countries—particularly South Korea—



have emerged as important leaders in digital education. South Korea has invested heavily in educational technology, integrating AI into national education strategies and higher education institutions. As a result, the country offers a valuable case for examining how AI can support language learning at both institutional and policy levels (Kim & Lee, 2021).

Despite growing interest in AI-enhanced education, limited research has examined South Korea's AI-based language learning model in a comprehensive and policy-oriented manner. This study aims to address this gap by analyzing the role of AI in language learning and evaluating South Korea's approach as a model for digital education. The study is guided by the following research questions:

1. How does Artificial Intelligence influence language learning processes?
2. What strategies has South Korea adopted to integrate AI into language education?
3. What opportunities and challenges do AI-based language learning tools present for learners?

### **Literature Review**

#### **AI in Language Learning**

AI has become an important component of technology-enhanced language learning. Research suggests that AI-based tools improve pronunciation, vocabulary acquisition, and learner engagement by adapting content to individual learning needs (Zawacki-Richter et al., 2019). Automated feedback systems and conversational AI tools allow learners to practice language skills beyond the

classroom, increasing exposure and confidence.

However, scholars also highlight challenges associated with AI in language learning, including over-reliance on technology, data privacy concerns, and unequal access to digital resources (Holmes et al., 2022). These issues suggest the need for balanced and ethical implementation of AI in education.

#### **Digital Education and AI in South Korea**

South Korea is widely regarded as a leader in digital innovation. The government has promoted AI integration through national strategies such as digital education reform and smart learning initiatives. Universities in South Korea increasingly employ AI-powered platforms for English and Korean language instruction, particularly for international students (Kim & Lee, 2021).

In addition, South Korea's emphasis on educational technology aligns with its broader goal of enhancing global competitiveness and soft power.

By exporting digital education models and attracting international students, Korea strengthens its position in global education networks (Lee, 2022).

### **Methodology**

This study adopts a conceptual and qualitative approach, combining literature review, policy analysis, and a mini case study. Academic articles published between 2019 and 2024 were reviewed to identify global trends in AI-based language learning. In addition, South Korean government documents and university policy reports related to



digital education and AI integration were analyzed.

To complement the policy analysis, a small-scale case perspective was developed based on documented practices in South Korean universities, including the use of AI-based language learning platforms, automated assessment tools, and online language support systems. This approach allows for a contextualized understanding of how AI is applied in real educational settings.

### **Analysis and Findings**

The analysis reveals that AI has a positive impact on language learning in three main areas. First, AI enhances personalization, allowing learners to progress at their own pace and focus on individual weaknesses. Second, AI provides real-time feedback, which is particularly effective for pronunciation and grammar development. Third, AI supports learner autonomy by enabling self-directed learning outside traditional classrooms.

In the South Korean context, these benefits are reinforced by strong digital infrastructure and institutional support. Universities actively integrate AI tools into language programs, especially for international students who require additional language assistance. However, the findings also indicate challenges, including disparities in digital access and concerns regarding data privacy and ethical use of AI technologies.

### **Discussion**

South Korea's experience demonstrates that effective integration of AI into language learning requires

more than technological availability. It depends on coordinated education policies, teacher training, and institutional commitment. Compared to many countries, South Korea offers a more systematic and policy-driven approach to AI-based education, making it a useful model for other education systems.

From a global perspective, the Korean case highlights how AI in language education can contribute to digital leadership and soft power. By combining innovation with education policy, South Korea enhances its international reputation as a forward-looking education hub. Nevertheless, addressing ethical and accessibility concerns remains essential to ensure sustainable and inclusive implementation.

### **Conclusion**

This study examined the impact of Artificial Intelligence on language learning, focusing on South Korea as a model for digital education. The findings suggest that AI significantly enhances language learning outcomes by supporting personalization, feedback, and learner autonomy. South Korea's strategic integration of AI into education policy and practice positions it as a leader in digital language education.

The study contributes to the literature on AI in education by providing a contextualized analysis of the South Korean model. Future research should include empirical data from learners and educators to further explore the long-term effects of AI on language learning outcomes.



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