

Opportunities and Challenges in AI-assisted TCSL: A Vygotskian Perspective

Shiyang Liu*

School of Communication, Tianjin Foreign Studies University, Tianjin, China

Email address:

lsy20230710@163.com (Shiyang Liu)

*Corresponding author

Abstract

The rapid development of artificial intelligence technologies, represented by large language models and automatic speech recognition, is profoundly reshaping the landscape of language education. This paper first attempts to review the practical applications of AI-empowered language teaching and explore the different forms through which AI can be applied to teaching Chinese as a second language. Then draws on Vygotsky's sociocultural theory to argue that mediational tools can help learners improve their abilities within the Zone of Proximal Development. From this theoretical perspective, artificial intelligence functions as an important mediational medium, capable of providing dynamic and personalized learning approaches. It can assist learners in completing tasks that are slightly beyond their current level of independent ability, thereby enabling them to gradually internalize new knowledge. Viewed in light of the Zone of Proximal Development, AI can dynamically adjust learning intensity according to learners' proficiency levels. This can effectively address long-standing challenges in teaching Chinese as a second language, such as the high cost of acquiring Chinese characters, the difficulty of mastering tonal pronunciation, and the lack of authentic communicative input outside the classroom. However, this paper also argues that the current reliance on AI tools in second language education still faces practical difficulties. These are mainly reflected in three areas: AI's insufficient accuracy in interpreting cultural nuances and contextual meaning; students' tendency to become overly dependent on tools, leading to a decline in independent critical thinking; and potential risks to the privacy and security of educational data. Vygotsky's sociocultural theory emphasizes social interaction. Therefore, at the present stage, AI can only serve as a mediational tool, while teachers remain the central agents in guiding interaction. This paper argues that, in the process of promoting Chinese as a second language, a blended teaching model characterized by teacher-led interaction and technology-enhanced learning remains the most effective learning model at present.

Keywords

Artificial Intelligence, Chinese as a Second Language, Sociocultural Theory, Zone of Proximal Development, Blended Learning