



Action Research on the Impact of Artificial Intelligence on Critical Thinking and Reading Skills in Moroccan High School Students Learning French as a Foreign Language

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Abstract

This action research explores the impact of artificial intelligence (AI) on the development of critical thinking and reading skills in Moroccan high school students learning French as a Foreign Language (FFL). Set against the backdrop of declining reading performance in Morocco (PISA 2022), the primary objective of the study is to develop AI-enhanced tools to guide the reading process and promote critical thinking, a skill deemed unattainable by AI alone. Drawing on Peirce's semiopragmatics and the revised Bloom's Taxonomy, the study adopts a mixed-methods approach with a sample of 30 learners divided into two groups (an experimental group using AI and a control group without AI). The four-week intervention uses AI tools such as ChatGPT to guide students in analyzing literary texts. The results show a significant improvement in reading performance in the experimental group, but no notable improvement in critical thinking skills. Learners perceive AI ambivalently, highlighting its advantages in terms of time-saving and comprehension, while expressing concerns about cognitive dependency and AI errors. The study concludes that AI should be viewed as a facilitating lever rather than a substitute for teaching, with the teacher playing a central role in guiding students in transforming AI errors into opportunities for critical reasoning. Finally, it is emphasized that current assessments do not adequately measure critical thinking, a complex and ongoing process.

Keywords: Artificial Intelligence (AI); Bloom's Taxonomy; ChatGPT; Critical Thinking; Foreign Language (FFL) Reading Skills; French as a; Semiopragmatics