

Familiarity, Use, and Perception of AI-Powered Tools in Higher Education

Anna Nikoulina

University of Applied Sciences and Arts Northwestern Switzerland, Switzerland
anya.nikoulina@fhnw.ch

Anna Caroni

University of Applied Sciences and Arts Northwestern Switzerland, Switzerland
anna.caroni@fhnw.ch

Abstract

The proliferation of AI-powered tools has significantly impacted higher education, transforming teaching and learning processes. In this study, a survey was conducted to compare familiarity, usage, and concerns regarding AI-powered tools among first-year and final-year students. First-year students exhibited a higher level of familiarity with AI-powered tools before starting their studies, while final-year students demonstrated a deeper and more diverse usage of these technologies. Despite concerns raised, the study does not conclusively support negative impacts on student engagement or critical thinking skills. Students express awareness of AI limitations and expect guidelines for AI use in coursework. These findings have significant implications for educational institutions and policymakers as they strive to leverage AI effectively to enhance the learning experience while addressing concerns and preferences in this rapidly evolving educational environment.

Keywords: generative AI, AI-powered tools, AI use, AI perception, higher education