

Access and Equity Implications of Generative AI Use in Programming Education

Generative Artificial Intelligence (GenAI) tools are increasingly present in higher education, yet uneven access to these tools raises important equity concerns. Subscription costs, usage limits, and varying levels of access may shape who benefits from GenAI-supported learning. This SoTL project adopts an equity-minded approach to examine how students' access to Generative AI (no access, free access, or paid access) relates to learning in an upper-level computer programming course within a four-year undergraduate program serving many first-generation and irregular students.

Using a concise, survey-based design, the study collects student self-reports of GenAI use and access alongside performance on a targeted programming assignment. Students also reflect on whether limited or no access to GenAI affected their learning, confidence, or efficiency. Analyses compare perceived and demonstrated learning across access groups to examine whether differences in GenAI access function as structural constraints on learning rather than individual deficits. The project aims to inform more equitable instructional in programming education.