

IT Mindfulness and GenAI Use: Evidence from Students' ChatGPT Prompt Logs

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Abstract

Understanding how students use generative AI (GenAI) can help educators promote effective and responsible learning. Prior research has largely examined students' intentions or perceptions, with limited evidence on how students actually use GenAI in real coursework. Using ChatGPT prompt logs collected over three semesters in an AI and coding course, this study examines how IT mindfulness is associated with GenAI use type. Content analysis of 480 prompts identifies eight distinct use types, which we further classify as instrumental (e.g., obtaining working Python code) or reflective (e.g., exploring alternative methods and reasoning about approaches). Linking prompt-level behavior with survey-measured IT mindfulness, we find that IT mindfulness is positively associated with GenAI use frequency and reflective (vs. instrumental) use. These findings extend IT mindfulness research to GenAI-mediated learning and provide practical implications for educators, given that IT mindfulness can be developed through training and guidance.