

Place of Generative Artificial Intelligence in Statistics Education

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Abstract

Generative Artificial Intelligence (GenAI) has emerged as another tool for learning and potentially for teaching, creating tensions around the integrity of assessment, raising questions about academic integrity, and prompting reconsideration of pedagogical practices. While research on GenAI in education is growing, its specific implications for statistics education remain less explored. This presentation reports findings from two discussion groups held at ICME-15 in 2024, involving mathematics and statistics educators from diverse contexts. Analysis of the group discussions identified four key themes: (1) applications of GenAI within and beyond the classroom; (2) its integration into learning environments; (3) ethical considerations, including bias, equity, and academic integrity; and (4) unknown-unknowns. Participants highlighted GenAI's potential to support learning while also expressing concerns about over-reliance, equitable access, and challenges for assessment. The presentation examines these themes in relation to current GenAI literature and offers practical insights into how GenAI can be meaningfully and responsibly integrated into statistics education, with implications for teaching, assessment, and future research.

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