

Student Perceptions of Inequities and Benefits of Active Assessment Strategies in the Math Classroom

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This study investigated student responses to active assessments in place of timed in-class exams in mathematics courses. *Active assessment* refers to assessment approaches that align with active learning paradigms (e.g., group presentations, portfolios; Katz, 2022). This research explored student perceptions of the benefits and the potential inequities of active assessment strategies. The poster will highlight both the student-identified advantages and areas of concern related to fairness, relevance, and resource availability. Findings contribute to ongoing discussions on equitable assessment practices in mathematics education for meeting the needs of all learners (Katz, 2022; Black and William, 2009; Laursen and Rasmussen, 2019).

Methods

Data for the study was collected through a two-stage process during the Fall 2023 and Spring 2024 semesters. Across the two terms, a total of 278 students from 13 different lower and upper division undergraduate mathematics courses completed a survey (during class time) which gathered their perceptions and experiences regarding the benefits and inequities of the particular active assessment strategies implemented in the course in which they were enrolled. The courses were taught by 8 participating instructors who implemented active assessment strategies. Following the survey, a subset of voluntary participants were selected for follow-up small-group interviews, for more in-depth discussions about their experiences. The qualitative data from these surveys and interviews was transcribed and analyzed to identify key patterns and insights related to the benefits and inequities of active assessments.

Results

Preliminary findings indicated the most common themes arising for perceived benefits included reduced anxiety, development of social skills, and connection to real-world applications. Common themes that emerged for potential inequities included uneven group dynamics (e.g., relative amount of work done by different group members) and format accessibility (e.g., assessments calling for advanced writing or linguistic skills). More than two-thirds of students responded that they preferred the active assessment strategy over a timed in-class exam. Overall, results suggest that, for students, active assessment benefits outweighed potential inequities.

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