ACCIDENTAL EXPERIMENT IN MATHEMATICS CLASSROOM SHOWS HOW TO ENGAGE ONLINE STUDENTS

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Melbourne COVID rules during semester 1, 2021, unintentionally created a large comparative study between students learning mathematics entirely online and those with some face-to-face classes. An analysis of student results for semester 1 found that students enrolled in online mathematics tutorials had both consistently lower participation and lower final marks than on-campus students. Except for one first-year mathematics subject where there was no difference between the two groups of students.

Class participation can be used as a measure of student engagement (Alrajeh & Shidel, 2020). In this particular first-year mathematics subject, the Unit coordinator made significant efforts to create an inclusive environment reducing barriers to participation faced by online students. Students were given multiple opportunities and incentives to stay engaged. The tutorials were highly structured and students were placed into formal cooperative learning groups, creating a learning environment both collaborative and collegiate (Johnson, Johnson & Smith, 2006), facilitating individual accountability, intrapersonal relationships and social support.

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