

Enhancing Critical Thinking Dispositions in the Mathematics Classroom through a Flipped Learning Approach

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ABSTRACT Unsatisfactory throughput rates as well as low mathematics averages for education students in higher education are a concern. A lack of critical thinking and critical thinking dispositions are possible contributing factors to poor performance. The aim of this ongoing research is to use flipped classroom learning as a teaching pedagogy and model that prepares students for their future careers. The aim of this flipped learning intervention is to enhance the critical thinking dispositions of mathematics students, to develop their understanding of mathematical concepts, to encourage responsibility for their understanding of knowledge and skills and to create opportunities for active learning through discovery and involvement with content. In addition, it explores the possibilities for students to become better problem solvers, with the aim of achieving increased throughput rates. The authors report on findings that flipped learning for the mathematics class seems to be a viable instructional methodology.