

USING ONLINE TOOLS TO DEVELOP NUMERICAL COMPETENCE IN BLOCK MODE TEACHING

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BACKGROUND

Low numeracy is of particular concern within STEM disciplines, leading academics to search for better means of mathematical instruction.

AIMS

The aim of this study was to investigate the implementation of online support tools to increase numeracy within a time-compressed block-teaching model.

DESCRIPTION OF INTERVENTION

Alongside small, focused groups, students had access to online numeracy tools, curated to aid in the development of numerical understanding.

DESIGN AND METHODS

N = 100 first year students were included in the study. On commencement, students participated in a survey to elicit their perceived ability, and history of learning, in mathematics. Students also completed a short quiz to establish a numeracy baseline. At the conclusion of the unit, students again completed both the survey and quiz, and the results were analysed.

RESULTS

Preliminary results indicate an increase in perceived mathematical ability, as well as an increase in actual performance, where there was engagement with the provided support tools.

CONCLUSIONS

The use of online support tools, particularly where students report low perceived numeracy, appear to aid in increasing perception and ability in this area. Further investigation is needed to determine what mix of tools is the most appropriate to maximise this benefit.

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