

Blended Tutorials in Mathematics Simultaneous F2F & Online Learning Events

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What are we intending to do?

On level 3 modules tutorials are less frequent and geographically not as widespread as other modules and this has caused some issues for students. This has been recorded from the student 'have your say' surveys.

This project seeks, via a pilot study, to explore the possibility of using “blended” tutorials (i.e. tutorials which take place simultaneously as F2F and online events) on the Level 3 Pure Mathematics module M337 Complex Analysis. The project leaders are a staff tutor on the M337 module team and an experienced AL on a number of M&S modules, with a current contract on M337. Our research question is: “What are the barriers and opportunities of using blended tutorials in a mathematical learning context?”

How are we going to do it?

We propose holding two blended events during the 19J presentation of M337, and then evaluating the success/barriers of such an approach via a number of research methodologies. The tutorials will be held at a F2F venue, and co-facilitated by the project leaders – one based F2F, and the other online. Technologically, the tutorial will be conducted using a Microsoft Surface Pro. This technology allows mathematical content to be written by hand on screen by the F2F presenter, and so can be screen-shared to both a data projector in the venue AND to an Adobe Connect session. The chat box and other online features such as polling will be maintained remotely by the other project leader.

Evaluation

To evaluate the sessions, two experienced ALs will be employed to conduct observations. They will be given an instrument of assessment, and asked to evaluate the learning interactions, both in the F2F space and in the online space. The two project leaders will also keep a reflective journal of their experiences before, during and after the sessions. We will also invite 10 students to interview, to explore the student experience during a blended tutorial. We will invite an equal balance of students who attended F2F as attended online.

It is hoped that this research will lend more insight into the potential problems and potential opportunities of using blended tutorials in the context of mathematical learning. The intended impact of this research on the student experience is a better understanding of how students can learn mathematics in a blended context.

If successful there are opportunities for more research into this area. It will give more variety and accessibility for students to engage with tutorials and go some way to improve retention.