Categories: ECA/New Staff, International Collaboration, Strategic Initiative, Teaching Innovation, Professional Staff Development - Provide a brief report of one A4 page, outlining the outcomes of the travel. The report, due 4 weeks after conclusion of the travel, should be suitable for publication to Faculty/Department/School newsletters, websites, etc.

Carolyn Kennett, Lecturer and Director of the Numeracy Centre used the FSE travel grant to attend the Swan Delta Conference held in Fremantle, Western Australia at the end of November 2019. Delta is a biannual conference that brings together tertiary educators in Mathematics and Statistics from the Southern Hemisphere. Delta attracts an international audience of academics interested in mathematics and statistics education, including disciplinary specialists, education theorists, and tertiary education practitioners across the sciences and engineering. The themes of the conference in 2019 included: curriculum design and delivery that addresses the needs of the 21st century learner, successful teaching and learning practices related to mathematics and statistics, innovative teaching and assessment approaches and practices and teaching mathematics and statistics to non-mathematicians.

The project that Carolyn presented is joint work with Associate Prof Michael Cavanagh from the Department of Educational Studies. The presentation discussed an innovative approach to providing personalised education and authentic assessment in units where students are active participants in their learning. This particular presentation examined the impact of these teaching methods on the maths anxiety levels of students. This presentation led to some interesting discussions with colleagues from the University of Auckland and the University of Queensland including future avenues for research applying some of the same approaches to more mainstream mathematics units.

The conference provided an opportunity to develop research collaborations with academics involved in tertiary mathematics and statistics education. In particular the conference has led to several new collaborations:

- An invitation to join an international group that is looking at ways to better evaluate the impact of mathematics support services led by a consortium of universities in the United Kingdom.
- A joint project with the University College of Dublin and several Australian universities looking at data collected by Mathematics Learning Centres and how the data can be used to inform both the work of the support centres as well as the work of lecturers convening units.
- A study looking at retention in Engineering students being led by the University of Melbourne.

Presentations at this conference included the evaluation of evidence based teaching innovations as well as talks covering other aspects of teaching and learning. There were a number of presentations from academics working in maths support centres like the Numeracy Centre. These presentations will help to inform the continued development of the Numeracy Centre and the work it does to support the quantitative skills of a broad range of students. Sharing information from the conference with colleagues in mathematics and statistics will also contribute to improving student experience bringing significant benefits to the Faculty. For example, the presentation of work by Katherine Seaton from Latrobe University on plagiarism in Mathematics and Computing is already contributing to FSE specific plagiarism education at Macquarie University.

Signature: [Signature]
Date: 10/1/2020

Email the completed report to Meredith Lowe (meredith.lowe@mq.edu.au), FSE Operations Manager