

CETL-MSOR Conference 2015

Maria Ryan: Using a Joint Assessment to Make Mathematics Real and Relevant.

The challenges facing undergraduate students of non-specialist or service mathematics modules are widely documented in the literature. As a practitioner lecturing Business Mathematics since 2007 to first year undergraduate students on a concurrent Initial Teacher Education (ITE) programme, the author has been exposed to negative discourse surrounding student engagement with their compulsory Business Mathematics module; the perceived lack of context for much of the material, a willingness to 'get by' or pass in order to meet the learning outcomes, and poor commitment to the subject matter are some of the reasons given anecdotally as to why the students dislike service mathematics. In 2011 the author was assigned to lecture on the Management Principles module as well as the Business Mathematics module to the same first year cohort in the first academic term; the author used this opportunity to introduce a joint continuous assessment, involving a practical application of Business Mathematics.

The purpose of this joint assessment was to enable students to apply their knowledge of descriptive statistics (from the Business Mathematics module) and environmental analysis tools (from the Management Principles module) in a practical way. Students were given the project remit in week 2, and worked in groups of 4 or 5; each group had to examine a local business using environmental analysis tools; they also had to conduct a survey on an aspect of that business that they had identified from the environmental analysis as needing further exploration. In addition, the students would meet relevant staff, i.e. manager, to enhance their knowledge of the business; and as part of the conclusion to their project, they would make recommendations to the business based on their research findings. The students had 7 weeks to complete the project, which accounted for 50% of each of the 2 modules.

The culmination of this endeavour was a considerable improvement in the students' attitudes towards business mathematics, and an appreciation of the application of mathematics to the business world, and indeed the local community. In addition to meeting the module learning outcomes, students were immersed in group work from an early stage of their studies, which helped them get to know many of their cohort quickly; they also gained organisational and leadership skills, computing skills, and communicative skills.

In this paper, the author presents the context for the project, the structure of the assessment, the challenges faced in the roll-out of the project, and the outcomes of the experience.