An Investigation of the Attitudes of Instructors and Students to On-line Assessment in Mathematical Subjects

Day 1 – Parallel III (16.30-17.00)

We study the factors that facilitate and/or hinder the adoption and use of Information and Communication Technologies in the assessment of mathematics. We investigate instructors’ behavioural intentions and students’ attitudes. Two models are developed, incorporating aspects of previous models of technology acceptance such as Technology Acceptance Model, Theory of Planned Behaviour, and Social Cognitive Theory. In the model for the instructors a new empirical variable, perceived usefulness to students, was added. To the students’ model three empirical variables – perceived reliability, perceived suitability and feedback – were added. Data for both models were collected from nine academic schools at The University of Manchester using two on-line survey questionnaires. A Generalized Linear Model was used to analyse both datasets. For the instructors we find that perceived usefulness and perceived usefulness to students have a direct effect on the use of web-based assessment. Attitude has a negative effect. For students the evidence indicates that perceived usefulness has a direct effect on students’ attitude.