Screencasting for student support in mathematical sciences

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The students in mathematics courses

• Many English as a second language students
• Most are school leavers or within a couple of years
• Anecdotal evidence: very poor preparation, prerequisites aren’t there
The students in mathematics courses

- Diagnostic test at the beginning of S2 2010
- Very poor performance re prerequisites confirmed
  Average 45% correct, 88 students
  > Just need a refresher
  > Can’t remember at all
  > Never understood it
  > Never done this

Moving a support centre into the 21st century
Mathematics and Statistics Help (MASH) Centre
- Traditional, on campus students only
- Physical move from a small office to a larger room
- Moving from a face-to-face, one-on-one model to blended learning
Why blended learning?

• Not to reduce face-to-face contact
• Increase independence of students from lecturer/tutor
  > Just in time help: Students not held up by minor misunderstandings at 8pm Saturday night
  > Can ask lecturers/tutors about more difficult concepts
  > Revision, additional practice
  > English as a second language students: replay helps understanding
  > Students pick what they need – more student focused

The MASH Centre website

• I just had a look at the worked examples you put on line. They look great and are well explained and easy to follow
• I had a look at one of the screencasts by Vida for HMS 112 and thought that it was impressive.

Stats: 18 Engineering Mathematics 1 students
• 2 students had looked at screencasts; 10 hadn’t; 6 didn’t know they existed
• Should there be more screencasts? “No idea”
The MASH Centre website

Research project

- University of Limerick
- Loughborough University

- Both known for their excellence in providing mathematics support

- Swinburne TAFE
- Swinburne Astronomy Online