

Digitally Ready for the Future

Application for small project funding

- Funding for small projects is available to staff and students under the following themes: Work placements; Employability; Enhancing T & L through the use of technology; Digital skills and literacies; Staff/student partnerships
- All successful applicants will be expected to
 - actively disseminate project outputs (e.g. by contributing to relevant T & L events and submissions to the Digitally Ready and/or Enhancing Teaching and Learning blogs)
 - participate in a celebration event in the Spring Term involving all successful applicants
 - complete a short project report and case study proforma by 31 May 2012
- Project funds will be available until 30 April and all project work should be completed by then.
- An electronic copy of the completed application form must be submitted to **Nadja Guggi** (n.guggi@reading.ac.uk) by **Monday 3 December 2012**.

Applicant details

Name Dr. Tim Lees Member of staff
Department: School of Construction Management and Engineering
Email: t.j.lees@reading.ac.uk
Telephone: 0118 378 7621

Project team (Please give details of any other team members)

Name N/A <input type="checkbox"/> Member of staff <input type="checkbox"/> Student
Department
Email
Telephone

Project type

- Research placement
- Project placement
- Staff/student partnership (staff-led)
- Staff/student partnership (student-led)
- Teaching & Learning/Research project
- APP project

Project theme/s (Please tick all that apply)

- Work placements
- Employability
- Enhancing T & L through the use of technology
- Digital skills and literacies
- Staff/student partnerships

Project Title

Podcasting for Maths: An Evaluation

Project Summary

Describe the proposed project (up to 500 words). Your summary should demonstrate how your project relates to the use of digital technologies and/or the development of digital literacies of staff and/or students, and should include the following:

- Background
- Aims and objectives
- Scope
- Outcomes and deliverables
- Sustainability
- Project schedule

Background

Many students in SCME have not practiced any mathematics since GSCE. This poses a challenge in the teaching of construction science which includes both materials and structures. Further compounding this challenge are the large class sizes in which part one modules are delivered (typically up to 140 students).

A new blended learning approach has been developed specifically to support students in the development of the maths skills needed. This includes the traditional lecture, buttressed by online formative quizzes, and tutorials, supported by video podcasting.

The podcasts are simply to construct. They are made by cloning an i-pad screen onto a laptop and running a basic screen capturing programme which is capable of recording audio simultaneously. Podcasts have been made to demonstrate the worked answers to the tutorial questions and in response to the demands from the students as and when they have occurred.

Whilst the traditional module evaluation mechanisms provide a robust data set for the quality assurance and enhancement needs of the University they are not as well suited to providing insight into the effectiveness of different pedagogical approaches. The success, or not, of a pedagogical approach could ultimately be judged by the learning which takes place at the individual's level. This type of data is best elicited through less structured research methods such as interviews.

This project will focus on the appraisal of how successful the podcasting approach has been for a number of different students. It will employ a theoretical underpinning loosely informed by the literature on the social construction of technology. This will provide a rich data set to compliment the more quantitative data from the module evaluation forms and statistic data from Blackboard.

Aims and Objectives

- To develop an evaluation of the podcasting approach which is complimentary to the traditional module evaluation approaches used.
- To evaluate the usefulness of podcasting to support the teaching of maths dependent construction materials and structures (as part of the construction science module).
- To provide a direction to the further development and implementation of this type of blended learning approach within SCME.

Scope

The scope of the study would be limited to those students currently studying the compulsory 'Construction Science' Part 1 module.

The findings and implications of the project could well have much wider applicability within both the School and University.

Outcomes and deliverables

As requested the project will:

- actively disseminate project outputs (e.g. by contributing to relevant T & L events and submissions to the Digitally Ready and/or Enhancing Teaching and Learning blogs)
- participate in a celebration event in the Spring Term.
- complete a short project report and case study proforma by 31 May 2012

This research will also feed into a PgCAP project assessing the wider blended learning approach taken in the module.

Sustainability

One of the driving reasons behind adopting a simple approach to the development of the podcasts is to make it easier for this approach to diffuse i.e. lowering the specific knowledge relating to software. Potentially this project could demonstrate that a small amount of time used upfront can save more time further into the teaching process (by enabling students to solve their own problems) whilst at the same time enhancing the provision to the student. It might even be best that a more centrally supported approach to this type of education is more appropriate.

The project has the support of key senior figures within the School and if funded will report to the School's Teaching and Learning Committee. In addition to this dissemination event will occur within the School to promote innovative learning techniques.

This approach will be developed and maintained within the Construction Science module.

Project schedule

Teaching is currently underway in the Autumn Term. Podcasts are being developed and released in response to student demand.

The summative assessment will take place over the Christmas period with hand in early in the New Year. If successful students will be recruited onto the research project in the Spring Term and interviews will take place by early March.

The podcast evaluation project will be completed by the end of March 2013 and the report submitted not late will be submitted no later than April 2013. The dissemination events within the School will take place no later than the end of the academic year 2013.