





An Investigation into the Use of E-Portfolio Tools to Enhance the Final Year Engineering Project Experience

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Background

- Project funded under the Royal Academy of Engineering's National HE STEM Programme
- 12-month duration
 - January December 2011
- Investigators
 - Ray Sheriff and Felicia Ong







Background and Rationale

- The Final Year Engineering Project (FYEP) requires students to apply a range of personal, practical and technical skills
- At Bradford, the FYEP spans two semesters and is assessed by a poster and a report
- Progress tends to be gauged through regular face-toface meetings between supervisor and student
- As study patterns and employers' needs change, new ways of learning and teaching may be necessary
- E-portfolio tools have the potential to enhance the FYEP experience from the perspectives of supervisor and student, respectively







Aims and Objectives

Aim

 To determine whether e-portfolio tools can be used to enhance the FYEP experience

Obj-1

 To identify existing practice among supervisors and students

Obj-2

 To raise level of awareness of capabilities of eportfolio tools

Obj-3

 To evaluate the performance of e-portfolio tools when used for FYEPs







Methodology

- Apply a mixture of qualitative and quantitative techniques
- Consult both supervisors and students
- Perform initial data gathering through online questionnaires and semi-structured face-to-face interviews
- Conclude with a pilot phase involving PebblePad, the University's e-portfolio tool







Progress – Data Collection

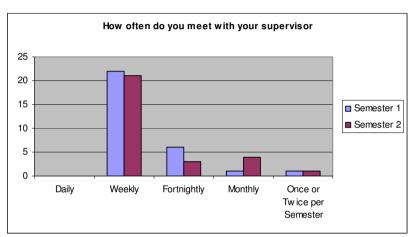
- On-line questionnaires were made available to FYEP students and supervisors from 20 May to 31 May 2011
- The questionnaires comprised five sections: Background, Meetings, Skills, Assessment and Technology
 - 13 FYEP supervisors and 31 students completed the on-line questionnaires
- Responses from students were received from all five of the School's Programme Teams
- Face-to-face interviews with supervisors have been performed

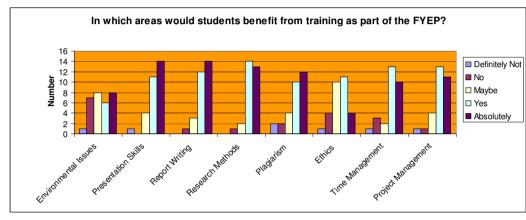


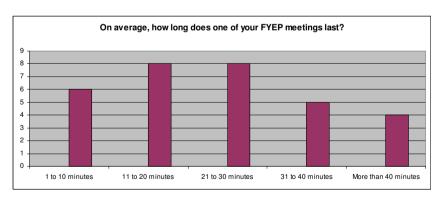


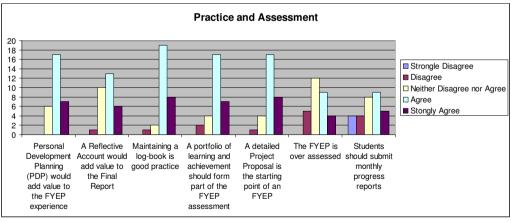


Sample Results – Student Experience







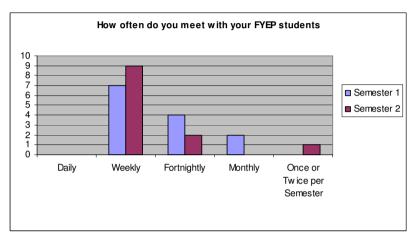


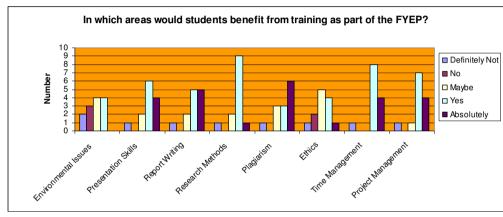


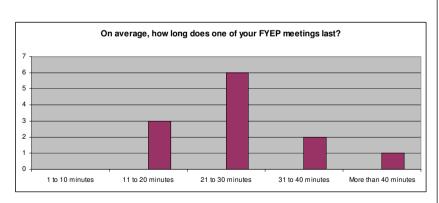


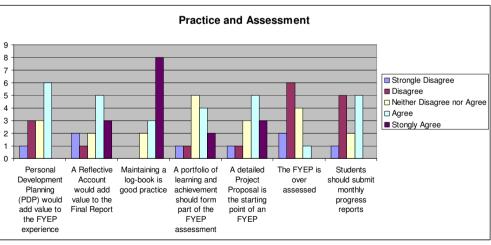


Sample Results – Supervisor Experience















Future Plans

- Analyse results of on-line surveys and semistructured face-to-face interviews with FYEP supervisors
- Provide PebblePad training for supervisors and students at start of 2011/12 academic Year
- Design suitable e-portfolio experiment for 2011/12 FYEPs
 - Modify University's SaPrA (Skills and Personal Reflective Activity) approach, originally designed for first year initial competence assessment and development
 - http://www.bradford.ac.uk/developme/sapra/index.php
- Write-up results in the form of a Case Study





