
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-to-face 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 e-portfolio tools**

- **Obj-3**

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

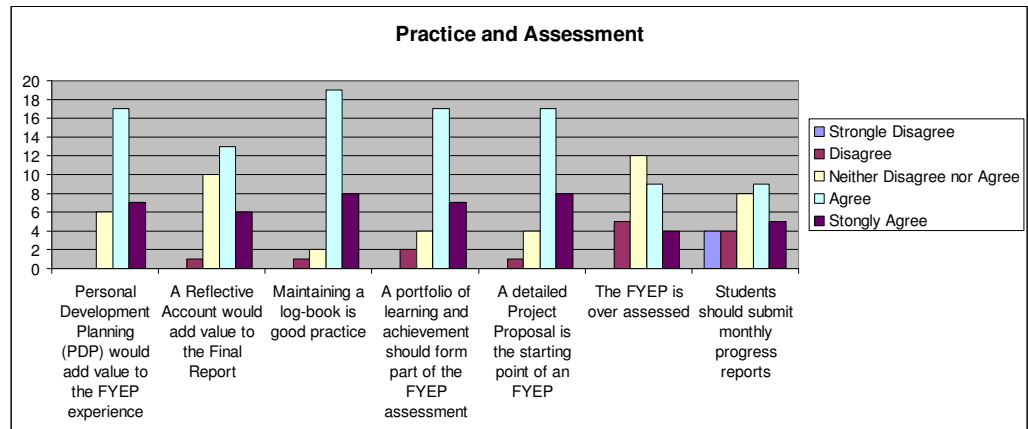
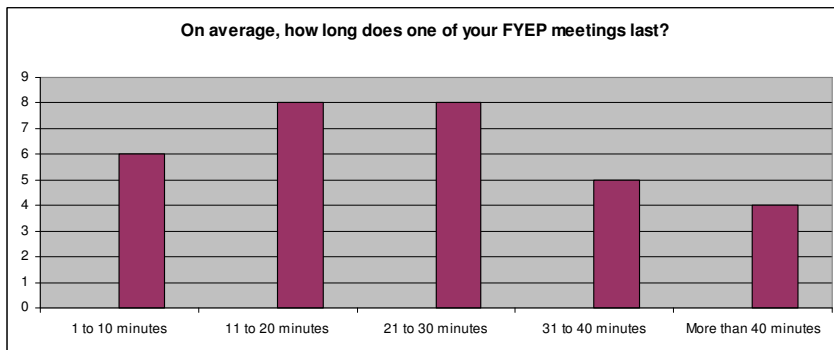
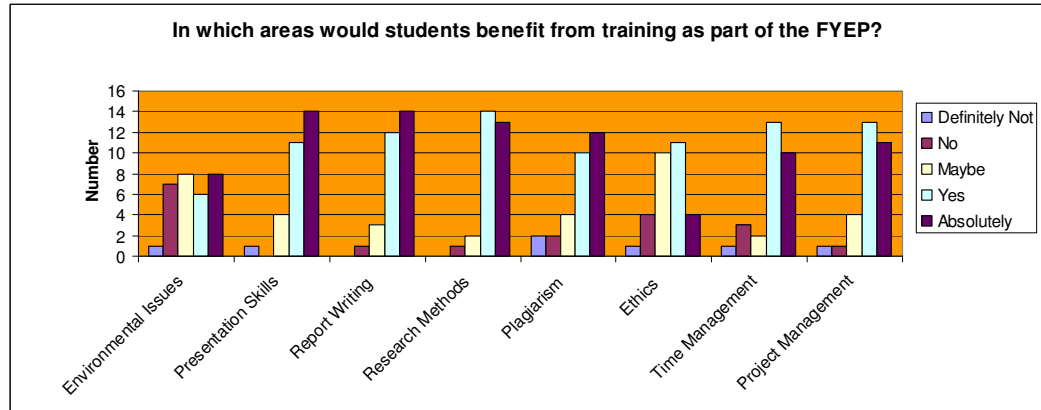
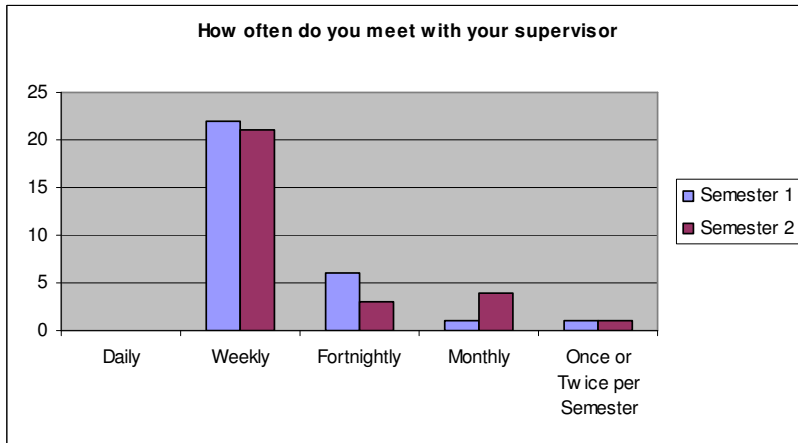
Methodology

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

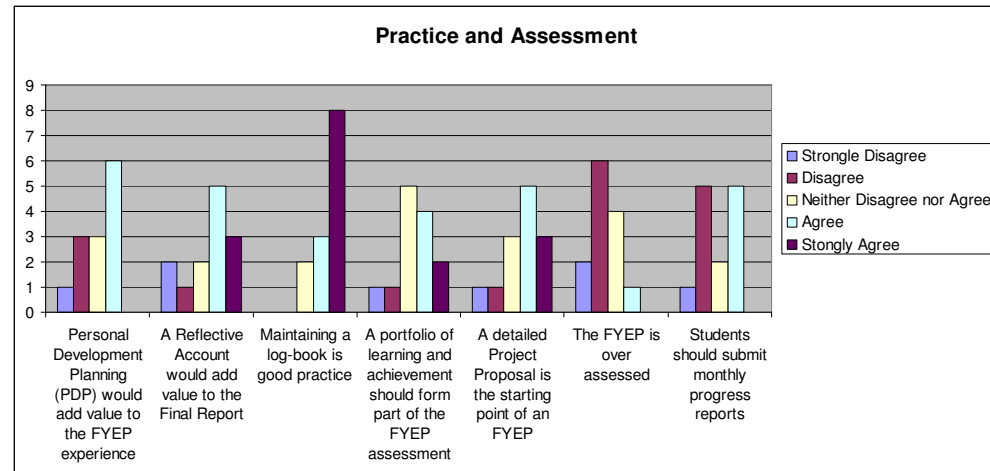
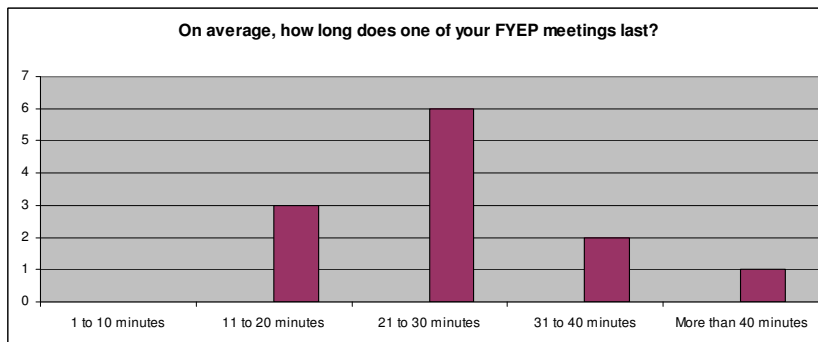
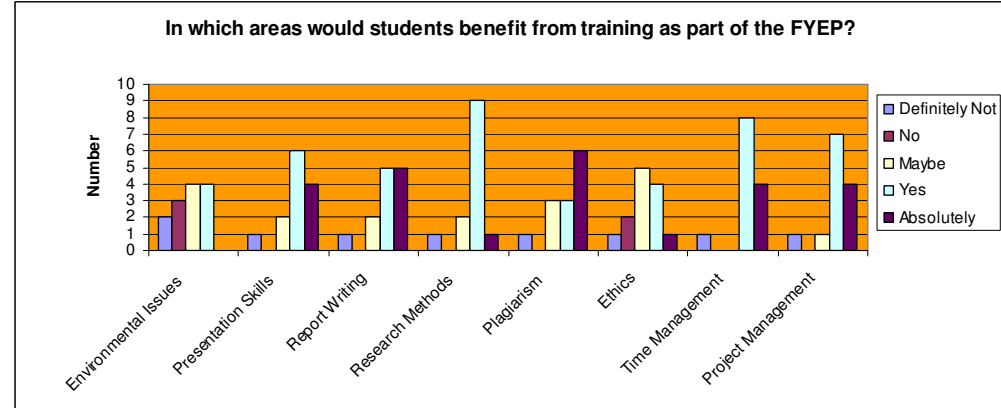
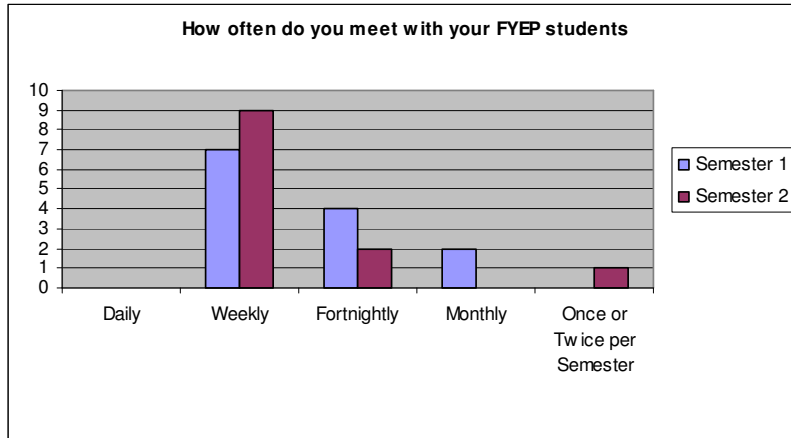
Progress – Data Collection

- **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 semi-structured 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**