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# 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

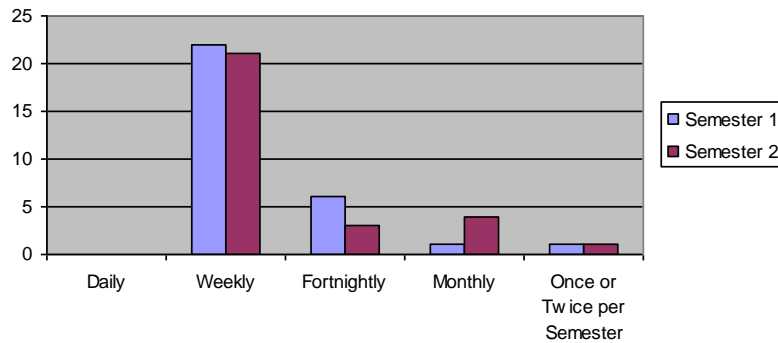
- **Apply a mixture of qualitative and quantitative techniques**
- **Consult both supervisors and students**
- **Perform initial data gathering through on-line questionnaires and semi-structured face-to-face interviews**
- **Conclude with a pilot phase involving PebblePad, the University's e-portfolio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

# Progress – Data Collection

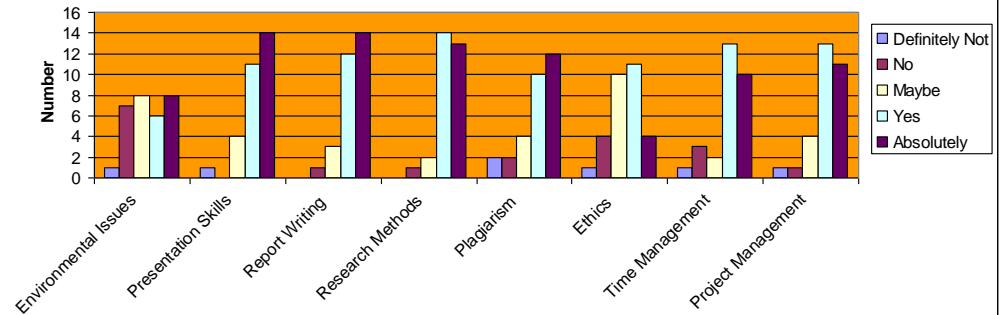
- **On-line questionnaires were made available to FYEP students and supervisors from 20 May to 31 May 2011**
- **The questionnaires comprised five sections: Background, Meetings, Skills, Assessment and Technology**
  - **13 FYEP supervisors and 31 students completed the on-line questionnaires**
- **Responses 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

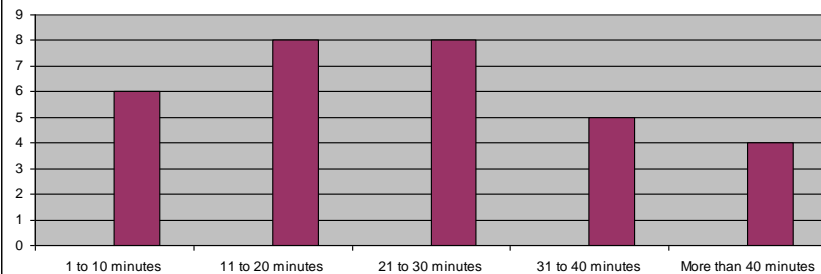
How often do you meet with your supervisor



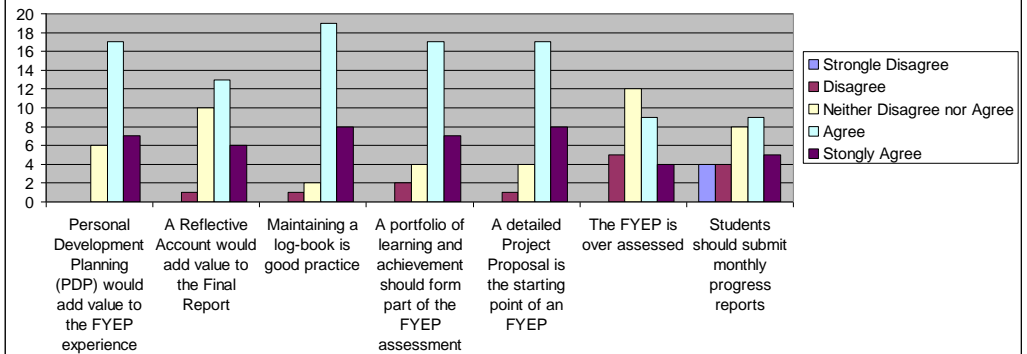
In which areas would students benefit from training as part of the FYEP?



On average, how long does one of your FYEP meetings last?

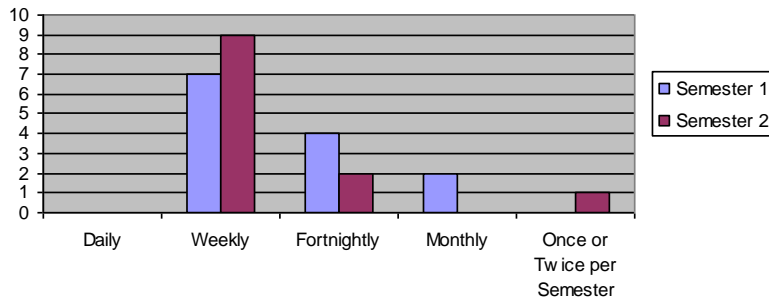


Practice and Assessment

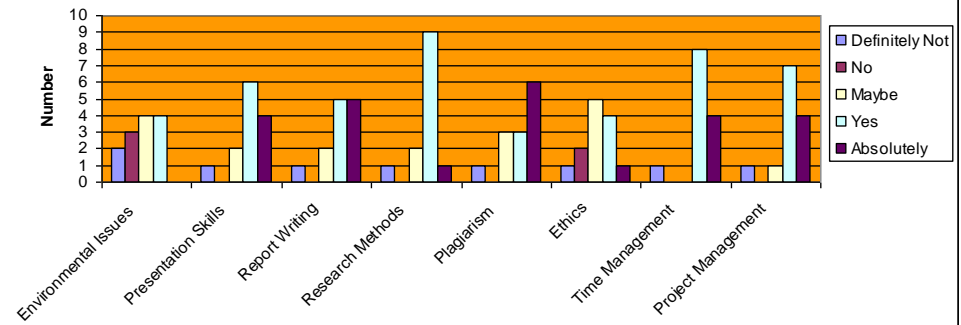


# Sample Results – Supervisor Experience

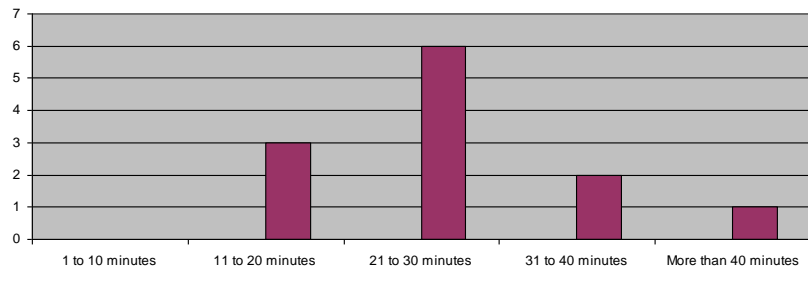
How often do you meet with your FYEP students



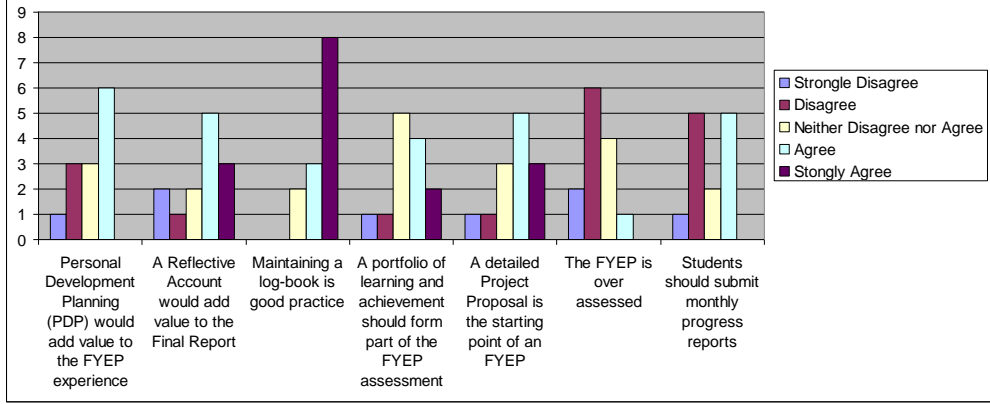
In which areas would students benefit from training as part of the FYEP?



On average, how long does one of your FYEP meetings last?



Practice and Assessment



# 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**