

Dr Prashant Pillai – School of Engineering, Design & Technology

Introduction

One of the key objectives of HE is to help student develop their detailed knowledge of their area of study and this task involves much more than the mere transmission of knowledge in forms of lectures.

Particularly in the field of engineering, it is important that graduates have not only understood the various engineering concepts in their particular field but are also well trained to be able to face all the technical problems that will come up during their future professional career. In order to attain this maturity and experience in tackling critical issues, it is a common rule in all engineering that the students carry out a 'Final Year Project'. This project provides a platform for the student to apply all information the student has received along the successive stages of his engineering course in a real project. Hence this project forms a critical module.

This mini-project looked at some of the current practice relating to final year projects followed in the School of Engineering, Design and Technology (EDT), at University of Bradford and the student experience of the final year projects.

Aim & Objectives

Aim: To investigate the best practice and experience of final year projects in EDT

Objectives:

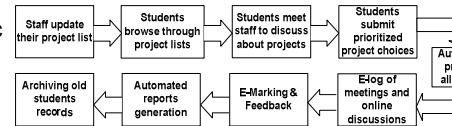
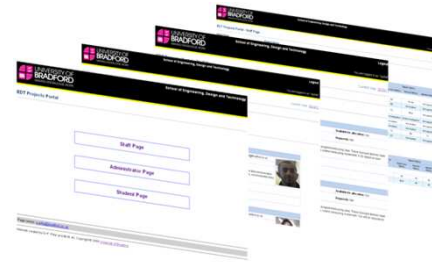
- To investigate the current practices followed in EDT
- To investigate the student experience
- To investigate the equity of supervision
- To propose future improvements

Current Practice in EDT

EDT Projects Portal

EDT has developed an in-house online portal for e-management the whole final year project life cycle.

- Online project management- Final Year/MSc Projects, Full-time/part-time
- E-marking/E-Feedback
- Genetic algorithm for automated project allocation based on student choices, staff load, fairness, etc.
- Authentication/Access control via university LDAP system.
- Connected to SAINT to automatically retrieve student information every year.
- Three dedicated sites for students, academic staff and administrative staff
- Different access rights for different staff
- Automated email notifications



Projects Supervision

Project supervision is an important aspect that influences the students experience with the final year project. Regular face-to-face meeting are arranged between the supervisors and their project students. The student would discuss their current progress and the future steps in these meetings. Meeting the students as a group has shown to have several advantages:

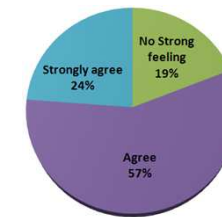
- There may be times when the students do not remember all the questions to ask, but others in the group may ask the related questions. Also helps introvert students.
- The students also learn from the experience on the other group members.
- Presentation during the meetings helps the student's communication skills as they get the experience to present their work even though in small groups. Efficient use of staff time - Most of the times the students have similar problems and the supervisor would be repeating the same things with each student.

Projects Open Day

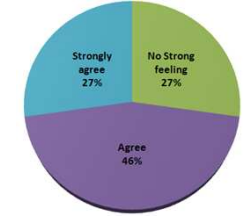
One of the key parts of the final year project in EDT is the final project open day. This provides a good platform for the final year project students to showcase their projects to not only other students of the university, but also to the various academics and most importantly external industrial visitors. While the students in the area of Technology Management have to make a 15 minute PowerPoint presentation on their project. The students in the other areas i.e. Civil, Mechanical and Automotive, Medical Engineering and Electrical and Telecommunications have to present a poster on their project work during the open day.

Student Feedback

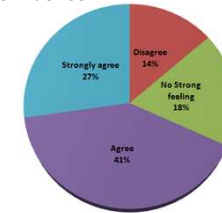
Has the project helped you to manage expectations, time, and workload?



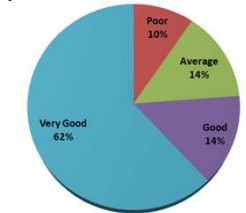
Has the project prepared you for your next step (job market or further studies)?



Has the project helped you to develop social and professional confidence?



How do you rate the quality of support you received from your supervisor?



Student Comments on their FYP:

"It covered all aspects in terms research, project management, planning and achieving a goal"

"It allows student to think critically and apply most and perhaps all the subjects learnt throughout our degree years into this particular module. It's not a 'Monkey see, Monkey do' activity."

"Reduce the amount of students under this supervisor as he is overloaded and only able to spend short period of time meeting each student before seeing another. Need more discussion time..."

Recommendations

The EDT projects portal has been extremely useful and it is recommended that other schools should adopt a similar tool. Provide more seminars and tutorial to all students on report writing skills, plagiarism, etc. – Make attendance to these compulsory.

Provide more guidelines on what is expected in a final year project – work carried out, and supervision levels, etc. Provide more project choices on the EDT Projects portal – maybe use project areas instead of specific titles. This also enables in the allocation of projects.