

# e3i Employability Case Study



## PDP in BSc Mathematics

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| <b>Subject group:</b>                                     | Mathematics and Statistics  |
| <b>Number of students involved:</b>                       | 130   |
| <b>Elements of the employability framework addressed:</b> | <ul style="list-style-type: none"><li>• Development of autonomy;</li><li>• PDP;</li><li>• Reflection on use of knowledge and skills: transfer of these to work environment;</li></ul> |

### Description of learning and teaching approach adopted

Students on the BSc Mathematics programme are required to complete an on-line Progress File comprising a portfolio of work, in the form of a personal website, and a reflective logbook. In their logbook students provide, for each module, a reflective commentary on their learning, identifying in particular what is going well and problems that need to be resolved. They are encouraged to develop an action plan to address the problems they have identified, and report progress made towards resolving them.

In year one, the expectation is that students make entries for each module at least weekly. These entries are assessed, and provide (in total) 20% of the mark for one module. Each student receives simple weekly feedback, in the form of a mark awarded against published assessment criteria; at the end of the year students provide a longer reflective summary of their development over this time, for which they receive fuller email feedback.

In year two, students continue as above, but the entries are marked bi-weekly with the marks again contributing towards a core module. The logbook marks comprise part of a general employability element of assessment in this module, as

students prepare to apply for an industrial work placement.

In the final year, the logbook assessment is built into the Project module, comprising 5% of the 30 credits available. This keeps the Project work higher on students' list of priorities and helps tutors to track their progress.

Throughout the course, staff are able to view students' logbook entries, with the system providing many views of the data. Staff can view all entries for their module, sorted by date - this provides very useful feedback on lectures, for example, within hours of delivery. They can also view the latest entries, to keep track of comments made that day. The system provides an easy way to reply to a student entry by email, so that many problems or questions can be dealt with quickly.

In order to provide a measure of privacy within peer groups, student logbooks are not visible to other students. Hence, in the current system, assessment is carried out by staff. Students do not have access to peer feedback and support in using the logbook as it is meant to be private and personal; they do, however, make full use of this when creating and maintaining their web portfolio of work.

This year (2007-8) the Technology and Management programme have also adopted the on-line Progress File system, bringing the number of courses and students involved to 10 and 230 respectively. Since the start of the session, these students have contributed more than 12,400 entries, comprising over 960,000 words (correct to March 4).

### Employability objectives and intended learning outcomes

The use of the system described above to embed PDP in the curriculum is intended to help students develop their ability to

- reflect on their learning, identifying what went well or badly - and why;
- identify problem areas, develop a strategy to deal with them and report on progress made towards its implementation;
- take control of their learning;
- develop autonomy: By providing a direct communication link with staff, the system also encourages students to take the initiative by contacting tutors for support as necessary. This in turn helps them to become more autonomous.

### Description of and tips for good practice; lessons learned

To work effectively, a system such as this needs to be very easy to use (both for staff and students).

It also needs the active engagement of staff. Students will perceive the logbook as having more value if they receive prompt replies or feedback to their entries.

Although students understand the importance of developing employability skills, they prioritise their work according to credit received, so it is important that the logbook entries are assessed.

### Key points of any feedback gathered or evaluation undertaken with students or staff

The system has been running now for five years. At the end of each year, students are asked to provide a summative review and feedback of the system, for which they receive some logbook credit. The results of this feed into the action plan for developing the system for the following year. Some selected students comments are shown below:

#### **Positive**

*'While I was writing something that I was afraid of, I was becoming stronger and with more courage to face all my problems.'*

*'I have found this progress file very useful throughout the year, in helping me to record my thoughts and feelings on all the modules, I have also found it useful in helping me to organise my time better by finding where my weaknesses and strengths are so I am able to see where I need to concentrate most on.'*

*'I also think that the progress file has helped me to develop my communication skills and to become more confident in talking about my own work and feelings on the course. It also allows you to see for yourself how you have progressed, or dealt with any personal problems.'*

*'The online progress file has been a huge help in making the jump from being in a 6th form to university. It forces you, once a week, to actually think about what you have done and what you still need to do.'*

*'From my positive comments, I was able to build on these as well as feel confident about the work. From my comments that showed I was struggling, looking back made me realise what I needed to do to improve and also build on aspects where I had problems. I could do this by giving myself targets and this is a way of recording them.'*

*'The logbook, looking back now, has made me realise how much I have improved, particularly in my computer skills.'*

*'Talking about my self the first thing that I thought it was that it would be terrible due of my problem that I faced in English language. As the year passing, day by day I was feeling more confident to write everything that I wanted to ask or everything that I wanted just to say.'*

*'I feel that this online diary has been a good way of looking back on how you feel you have been coping throughout the year.'*

*'It also lets me see how I felt at the beginning of the year about the course and compare to how I feel now.'*

*'It was a way to express my feelings without thinking of what my teacher will think about me. I like this very much and makes me more strong because when a teacher send me an email as a reply of what I wrote in the logbook I fell that our teacher really care about our progress.'*

#### **Negative**

*'I also found that sometimes I would be writing in the logbook just for the sake of writing in it because I knew if I didn't I would lose marks.'*

*'However, I expected responses sometimes but didn't always get them which made me question whether some lecturers actually read the progress files.'*

*'Why should it deserve marks? At degree level, is documenting the request for help a valid allocation of the marks?'*

### Resources used

Custom developed set of web pages hosted on a web server running appropriate software (PHP/MySQL).

This information can be made available in other formats.

Please contact us for details.