



REAP Completion Report Foundation Pharmacy, School of Pharmacy

Project Sign-off

1. Project achievements

Have all project activities or deliverables been completed? What, if any, work remains outstanding from your plans for this academic year?

Two projects were undertaken within the School of Pharmacy. One involved establishing a database of prescriptions that could be used by MPharm year 3 students to facilitate revision in a competency based subject and the other to establish an electronic system of feedback on assessments for MPharm year 1 students. Both of these have been completed. Work remains to be done on assessing the effectiveness of these changes and in publishing the findings.

At the end of the project, do you feel you achieved the aims and objectives identified at the start? What is missing? What have you done that wasn't in your original plans?

The majority of the aims and objectives have been achieved. The overall objective of the project was to identify how assessment activities within the MPharm programme could be linked into students' e-personal development portfolios (ePDP) with the aim of improving the link between assessment and attainment of the students' educational and professional needs. The assessment activities focussed upon have been re-designed and the changes implemented. Students have as a consequence an improved understanding of their educational and professional needs. There has been limited linkage of the identification of these needs to the ePDP. This has occurred in the third year of the programme but has not yet been implemented into the first year ePDP.

Within the first year class, Foundation Pharmacy, the aim of the project was to improve the feedback on the principal output from this class (a problem based dissertation) by developing an electronic pro forma which could be used by both staff and students and which would provide a base upon which students can identify the skills needing development. This would then be linked into the student's e-PDP. The electronic pro-forma has been designed, incorporated into SPIDER, used initially in a pilot project and then for the class and staff as a whole. Students have used the pro-forma to identify the skills which require development but the time-scale of the project was such that it was not possible to use that information to inform the ePDP, at least in year 1.

2. Impact on students

What has the impact of the project been on students? Have marks, attendance, retention, progression or other key indicators changed or improved (please give details)? Do students demonstrate differences in their satisfaction with the class or course? What evidence can you draw on (please give details)?

In the Foundation Pharmacy class, mean marks for the dissertation were compared and feedback was obtained from questionnaires and the class review process. In academic year 05/06, the electronic feedback pro-forma was used in pilot form and 27% (32 out of a cohort of 117) of the students received feedback in this way. All students should have received feedback using the electronic pro-forma in 06/07 but only 55 % (46 out of 83) of respondents to the questionnaire reported that they did so. However, 91% of respondents received oral feedback and 77% written feedback in another form. The mean mark \pm standard deviation for the dissertation was 62 ± 8 , 64 ± 7 , 62 ± 9 and 66 ± 9 in years 03/04, 04/05, 05/06 and 06/07 respectively. Thus it is not possible to conclude that use of the feedback pro-forma has significantly improved academic performance. However, students were asked to self assess the first and final versions of their dissertations and this data shows students thought that the feedback process had improved their mark by approximately 10%. The mean mark \pm standard deviation that the students awarded for the first and final version of the dissertation was 59 ± 8 and $69 \pm 7\%$ respectively. Although the mean mark given by staff for the final version of the dissertation was close to that of the students' assessment i.e 66 ± 9 vs $69 \pm 7\%$



there was no correlation between the individual marks that were allocated by staff and the students. Of the 80 students who self assessed 65% (52 out of 80) assessed the mark for the final version within 10 marks (i.e. within a degree classification) but the remaining 35% did not. In the majority of these cases(21 out of 28, 75%), the students had over-assessed their mark with the overestimate ranging from 11 to 33 marks.

From the questionnaires it was clear that those students receiving feedback via the pro-forma exhibited a higher level of satisfaction with the process than those who had not. 89% of students who received feedback via the pro-forma agreed the feedback was 'useful' or 'very useful' compared with 58% of those who did not. None of the students who received feedback via the pro-forma assessed the feedback as 'unhelpful', compared with 23% of those who did not receive feedback via the pro-forma. Some of the favourable comments on the feedback process were:

"the feedback form was especially useful, I found it easier to work from as it was segmented into the different aspects of the report I had written and had comments on both the strong and weak elements of my report..."

"[the feedback] was able to convey in a clear and concise manner the areas of my essay which required improvement"

"The feedback i got from my counsellor was excellent and very informative. I feel that i was able to improve my essay vastly with the feedback. Also, the counsellor was very approachable, although difficult to get in touch with at first. He helped by giving positive feedback as well as the negative and did not just focus on the negative, making me more willing to put work in to improve my essay."

A few of the comments, however, indicated that students preferred the feedback orally and that they had difficulty arranging meetings with academic staff as indicated from these quotes.

"The face to face feedback was much more effective than electronic as the point becomes much clearer when someone is explaining it to you. I was able to ask questions about things that may not have been covered in the feedback on spider."

"Feedback from my counsellor was via email and consisted of: "Looked fine and I didn't see any need for improvements." This was of no benefit to me whatsoever, and I would be interested as to what mark i would have got if i had taken this "advice" and not made any adjustments."

3. Impact on staff

What impact has the project had on staff? Has workload changed significantly? Do staff members involved in the project feel differently about the class or course now that changes have been made? How?

The Foundation Pharmacy class co-ordinator states in the class review that "the REAP project is working to improve student feedback for submitted assessed work. This has developed new methods to improve the quality and delivery of feedback on the Foundation Pharmacy essay plan and first draft". Workload has not changed significantly within PP3 and within Foundation Pharmacy it will have increased in 06/07 because staff were asked to give feedback both orally and via the pro-forma. However, in the longer term as staff become familiar with the feedback system and it becomes more tailored to suit individual staff use, it should result in reduced workload.

Feedback from the staff has not yet been obtained but it is our intention to collect these data.



4. Impact on costs

How do you think that the changes you have made will affect the efficiency of class or course delivery in the future? Have costs been reduced? Or has quality improved significantly with no additional long-term costs?

Costs have not been reduced but the quality of feedback has been improved in both classes. Increased use of the prescription tutorial, modified to include all types of prescriptions, will allow staff to concentrate more on the students who need additional help. These students may be self selected after they have accessed the tutor.

5. Sustainability

Explain how current project activities will continue in the department. What measures are in place to ensure that activities are embedded? Who is responsible for ensuring sustainability?

Manpower resource is available to continue to develop SPIDER and implement the changes associated with the ePDP. The staff involved in the project aim to continue to develop both tools and view this as a continuing commitment to introducing innovation within the curriculum.

6. Plans for further development

Are other courses or classes in the department planning to change their assessment practices as a result of your work (please give details)? What do you think would need to change in your department if your REAP-supported ideas were fully adopted across all courses and years?

The use of the electronic feedback proforma has the potential to be extended into other classes within the MPharm and any degree programme within the University. This will involve further development to include other types of coursework on which feedback is given e.g. laboratory reports and essays. It is intended to continue this work beginning with changes to the first year of the Biomedical degrees and the second year of the MPharm. The prescription tutorial has the potential to be used as an assessment tool by other Schools of Pharmacy, within degree programmes for medical and nursing students and within hospitals. Full adoption of the REAP- supported changes will have staff development implications as not all academic staff are familiar with the use of VLEs such as SPIDER.

7. Lessons learned

What changes contributed most to improving the quality of student learning?

As described above the quality of student learning was improved by:

1. The opportunity for self assessment within Foundation Pharmacy.
2. The provision of enhanced feedback within Foundation Pharmacy.

What changes contributed most to reducing costs?

Not applicable

What implementation issues were most important?

It was essential to have a VLE that could be modified to suit the needs of the projects and to have the personnel who have the expertise to do this to a short timescale. Monitoring of the feedback process revealed that students did not receive uniform quality feedback and that this was a cause for concern for them. Some members of staff did not provide the feedback electronically as requested and this implies unfamiliarity with SPIDER. This remains to be fully addressed.

If you could start again, what would you have done differently? What lessons would you pass on to other departments undertaking similar projects?

If we were to begin the project again there is nothing we would do differently as we consider that we have made significant progress with both projects. We are of the view that such progress has been achieved by the fact that we have worked well as a team and that we have been prepared to prioritise the time needed. Thus advice for other departments undertaking similar projects is that substantial



staff resource other than that provided by the funders will be needed together with the support of senior management.

8. Future Research

Have any issues emerged from the project which merit further investigation or future development work by your department, by CAPLE or by other organisations?

It has become clear that the prescription tool could be used to inform teaching within the PP3 class by identifying those aspects that the students have difficulty understanding. Thus it is planned that "just in time" teaching will be introduced to this class from next year using the prescription tool to inform what is taught in the formal tutorial sessions. Talks have also been held with the School of Pharmacy at Robert Gordon University and it is planned to make this a common tool with both Schools contributing to expanding and updating the database of prescriptions.

9. Dissemination

List the dissemination that has been done (or is being done) since January 2007 about project findings and outcomes, e.g. journal articles, conference presentations. Please give details.

List any additional publicity your part of the project has received, e.g. press coverage, awards.