## Minding the gap:

Employing Formative Assessment Techniques to Assist Undergraduate Students with the Transition to Higher Education.

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### Introduction

s lecturers and tutors we assume our higher education students are eager and ready to learn, and we feel we know what we mean when we say we want students to learn, but in many cases we do not make our expectations explicit and so students are unsure about what we want them to do. Indeed, on entering higher education students are met with a range of challenges, not least of which is to adapt to the

Discourse: Learning and Teaching in Philosophical and Religious Studies, Vol. 7, No. 1, Autumn 2007, pp. 179 - 190

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culture of learning within the higher education institution and to understand what lecturers require them to do in order to learn. The higher education learning culture is likely to be quite different to that which they experienced at school and so it requires some re-orientation on the part of the learner. This process of transition is regarded by Ballinger (2003, p. 99) as a 'potentially disorientating period at the start of their degree studies' but a lecturer's response, as Railton and Watson note, is often inadequate:

What we often end up doing is expecting students to adapt their practices to fit ours as if by osmosis: we expect students to 'speak the same language' as us and intuitively understand the adjustments in their learning practice that higher education demands. (Railton and Watson 2005, p. 183).

Obviously, what is required is an acknowledgement of the gap between students and tutors and the development of teaching and learning processes and techniques which can help students make an effective transition to higher education.

Through observing year 1 students during my six years of teaching in higher education I have come to see evidence of this gap for myself. I have seen the real concerns and lack of confidence that some students have in carrying out the basics of study—reading, note-taking and, of course, assignment writing—and so in the academic year 2005-06 I decided to look at ways to address the learning culture gap experienced by my students. Faced with an assessment regime in which 'everything counts' I was nervous about making changes to, or experimenting with, the teaching and assessment processes of modules for fear of getting things 'wrong' and so disadvantaging students. But it was this very observation that alerted me to part of the problem; in most modules I was teaching students had little opportunity to really engage with learning processes (such as reading critically, presenting arguments or writing for an academic audience) until they were required to do so for a written assignment, by which stage there was much at stake if they were to get things wrong. Inspired by Phil Race's (2001) observation that formative assessment in higher education can provide opportunities for learners to learn from their own mistakes, I set about devising suitable formative assessment strategies which would give the students an opportunity to practice or test their writing

and study skills and which would allow me to provide feedback on how they might improve. It was hoped that this exchange would assist with their enculturation into higher education without weakening the formal assessment process. As a result of reading I decided to use a combination of formative assessment techniques including peer evaluation, the 'one-minute paper' (Stead 2005) and the 'briefing paper' (MacMillan and McLean 2005). This blended approach also allowed me the opportunity to evaluate the effectiveness and suitability of the various techniques for my purposes. As a result of introducing formative assessment it was hoped that students would:

- have opportunities to reflect on their learning, to ask questions about their learning and be challenged to improve upon their skills and knowledge
- develop skills in academic writing within a higher education context
- improve their confidence in preparing and writing assignments
- have an opportunity for their learning needs to be addressed individually by a tutor
- understand the expectations of their tutors/lecturers within higher education
- understand the importance of working collaboratively with their peers as well as the value of giving and receiving feedback from peers.
- develop the habit of self-evaluation and critical reflection on their learning

I chose one particular level 1 module in which to introduce these changes. My teaching is in the area of initial teacher education and my main duties involve the preparation of student teachers of religious education for the post-primary school sector. The particular module which I chose as my focus was an introductory module in which students receive a basic orientation to issues related to the teaching of religious education and, in light of the contentious nature of the subject, are encouraged to develop an educational rationale for its teaching in public schools. A second major focus of the module is to engage with pedagogical issues and so come to a beginning competency in the

teaching of RE in schools.

Assessment for the module consists of two assignments: a 1,500 word essay and a subject application assignment. For this reason the first part of the module tends to focus on more theoretical aspects, in preparation for the essay, while the second part focuses on subject application aspects, in preparation for the subject application assignment.

I introduced formative assessment to my teaching of this module in semester one of the academic year 2005-06. The group consisted of 23 BEd Religious Education Post Primary students. The class was taught in a seminar room with basic resources (chalkboard and overhead projector) in ten 2 hour slots over twelve weeks (during weeks 7 and 8 students were on school placement).

#### **Methods**

In order to pursue the intended learning outcomes set out above, the three main formative assessment tools (one-minute papers; briefing papers; peer evaluation) were introduced into the module as shown below. Also shown below are four methods whereby the success of these methods was evaluated: the first assignment (reflective essay), the second assignment (subject application), a student evaluation of the formative assessment (by questionnaire) and a module review questionnaire. There were also ongoing informal conversations and emails with students relating to their progress with the various assessments.

#### One-minute Papers

The one-minute paper (OMP) described by Stead (2005) is an exercise usually used at the end of a class which requires students to write down answers to two questions:

- 1) What was the most important thing you learned in class today?
- 2) What question remains unanswered?

Week	Formative Assessment tool	Evaluative method
1	One Minute Paper	
2		
3	One Minute Paper	
4	Briefing Paper (500 words)	
5	One Minute Paper	
6		
7		
8		
9		Submission of reflective essay
10	Peer review of an introduction to a lesson One Minute Paper	
11	Peer review of lesson plans	
12		Student Evaluation Submission of lesson plans Module review

The responses are written anonymously and collected by the lecturer at the end of the class. The lecturer is then in a position to review the responses in preparation for the next class and this helps in two obvious ways—it clarifies whether the key intended learning outcomes have been met and feeds into the preparation for the next class. It allows the lecturer to provide specific feedback on common questions or areas of concern. The benefits of this technique also include the fact that students are being asked to generate questions, a higher order skill, and that students who might be shy about asking questions in a lecture environment are provided the opportunity to do so on paper.

In the course of this module I used the OMP four times. This seemed a reasonable frequency taking into account that Stead (2005) has noted that the impact of the technique can be diluted through overuse.

Feedback from the questionnaire indicated that students valued this exercise. Ninety-four percent said that the OMP was 'useful' or 'very useful' in giving an opportunity to ask questions and in getting helpful feedback although fewer (sixty-nine percent) felt that it helped them to understand what was being taught. In the evaluation questionnaire some students indicated that the week-long interval between asking the questions and receiving feedback was too long and therefore did not aid their learning sufficiently. For others, the feedback did not provide enough detail. One student commented, 'The one minute papers were a good idea in order to ask questions. Because questions were not answered individually sometimes the answer was not clear. A good idea though.' And another noted, 'I thought this method was ok... I prefer a more detailed task to ensure that I understand.' Saying that, other comments about the process were very positive:

It provided me with an opportunity to ask questions that I would have been uncomfortable asking in class. My questions were always answered during feedback.

Very useful as it gave us a chance to reflect on what we had learned so far.

I felt this was very helpful as it helped conclude a topic with issues or topics that I still wanted addressed.

Clearly the OMP did go some way in achieving the first of the learning objectives set out above by providing opportunities for students to reflect upon their learning, to ask questions about their learning and be challenged to improve upon their skills and knowledge.

#### **Briefing Papers**

While OMPs provide a certain level of feedback for both the lecturer and the students they do not provide structured individual feedback of a high level—the kind of feedback which would encourage students into deep reflection on their arguments and opinions and their ability to express these. On reading MacMillan and McLean's (2005) paper on 'Making First Year Tutorials Count' I was impressed by their use of a briefing paper and the deep learning they believed resulted from it. In this context the briefing paper is a 500 word paper designed to express a considered position on a key issue. MacMillan and McLean (2005, p97) express their intention in using this method to 'motivate students not only to read about and research a topic, but also to think about it and, indeed, to produce an academically credible, well-supported, reasoned and coherent stance on a particular question.' But, as I shall explain, it also provided an opportunity for students to receive feedback on a piece of written work from their tutor and their peers. In MacMillan and McLean's work the briefing paper was submitted five days prior to the class and on the day of the class the students were placed in groups to deliver their briefing papers and to question each other on the stance each had taken. While this was happening the tutor discussed each student's own work individually for about five minutes. I followed this pattern as closely as possible in my practice too. I set aside the full teaching time in week 4 to allow for the briefing paper session to take place. Students submitted their papers to me electronically several days prior to the class. My main intention in marking them was to give feedback primarily on writing style and referencing, rather than comment on the argument which would be dealt with in the group work. No mark was awarded, simply annotation and oral feedback given. On the day I gave some brief guidance to the students about the kind of questions they should be asking of one another and then the students were given plenty of time to present their papers to each other and engage in discussion of key issues. This gave

me time to circulate and give feedback to students on their writing.

As a follow-up to the exercise students were to submit a redrafted version of the paper, but this time as the first part of their first assignment for the module. The assignment was in two parts:

- a) Provide a statement justifying the teaching of Religious Education in Post-Primary schools. (500 words)
- b) Comment on how you came to hold the opinions in your statement. You should reflect on discussions in class, your school visits and your reading for this module. (1,000 1,500 words)

In other words the formative assessment fed directly into the summative assessment and so students could see the direct benefit of the feedback they were receiving, indeed in the student evaluation questionnaire eighty-seven percent of students rated its usefulness in giving helpful feedback as 5 on a five point scale, where 5 indicated 'very useful'.

The fact that students rated this activity very highly was also reflected in the comments made on the evaluation questionnaire:

Excellent, really helped me to structure my assignment properly.

This was excellent as I had no idea what was expected of me in terms of how to write a university level essay.

I found it very useful to write something mid-semester. Writing it made me clarify my viewpoint which meant that my view could be challenged by work later in class.

I thought the briefing papers were an excellent idea as it allowed us to actually collate all our ideas and form opinions. It also gave us the chance to practice our writing, referencing and essay skills which was invaluable for the assignment later.

In looking at these comments alongside the learning outcomes set out above it is clear to see that as a result of this activity students were helped to develop skills in academic writing within a higher education context and to improve their confidence in preparing and writing assignments. They also had an opportunity for their learning needs to be addressed individually by a tutor and begin to understand the expectations of their tutor. In turn this provided valuable mid-term feedback which allowed me to tailor my teaching more effectively to the needs of the students in terms of their writing skills and knowledge. The value of such feedback has been acknowledged as significant in improving learning and teaching (Diamond, 2004).

#### Peer Evaluation

The value of peer assessment has recently been questioned by Ryan et al (2007) but they argue that peer evaluation or review as a formative assessment tool can still be helpful and meaningful to students. I used peer evaluation in this module in two ways. One was through the briefing paper discussion described above and the other was as part of the subject application element of the course. An important aspect of preparing students for their first experience of teaching in schools is to help them with preparing a lesson and knowing how a plan for a lesson translates into practice, so in weeks ten and eleven students were not only given guidance on how to plan a suitable lesson for Religious Education but they were given an opportunity to, firstly, present a lesson plan for scrutiny by their peers and, secondly, to present part of the lesson and receive peer and tutor feedback. These exercises provided enormous opportunities for discussion and reflection. After each presentation members of the class were encouraged to identify positive aspects about the presentation in relation to content, concepts, skills and activities using positive language such as 'The best lesson plans...', 'Those which were most effective in teaching concepts...', 'It was obvious skills were being developed when...' and 'some of the most interesting activities were...'. This peer feedback was then collated by the tutor to provide a resource of good advice for beginning teaching.

In the student evaluation questionnaire students indicated their appreciation of the peer evaluation through their responses:

Excellent! I had been worried about what was expected of me and it was great to have this opportunity to make a presentation in an atmosphere where everyone felt they were learning something and getting good feedback without being looked down upon.

It was good to have the opportunity to practice lesson planning – having done so shows you how detailed and clear your lesson plan should be. This was very beneficial.'

I really enjoyed these workshops – they were fun, but at the same time I learnt a lot.

I felt this was very useful. I really enjoyed doing these and watching others make presentations really helped me learn. It gave us the chance to pick up the good things and leave the bad and get the tutor's helpful opinion.

In terms of the learning outcomes for this project the peer assessment exercises certainly helped students to achieve an understanding of the importance of working collaboratively with their peers and the value of giving and receiving feedback from peers as well as developing the habit of self-evaluation and critical reflection on their learning.

#### Measurements of Success

As indicated already the success of this project was measured in a number of ways. Feedback from the student evaluation questionnaires has already been mentioned above but it is worth indicating the results of the other evaluation procedures:

# Module Results (reflective essay and subject application assignment)

All students passed this module with marks ranging from forty-five to seventy-five percent. The class average was sixty-one percent. Unfortunately as this was the first time of teaching this particular module no comparison with previous results was possible, however these results compared favorably with those in other modules taken by the same group in the same semester.

#### Module Review Questionnaire

On a scale of 1-5, where 1 indicates 'very poor' and 5 indicates 'excellent', the overall module rating mean response was 4.38. And in response to being asked to rate how challenging and stimulating the module had been the mean response on the same scale was 4.68.

Taken as a whole the student evaluation questionnaire results, the module results and the responses to the module review would seem to suggest that the learning outcomes were met.

#### Conclusion

In a recent extensive literature review on 'the first year experience' Harvey, Drew and Smith (2006, p. 5) noted among their findings that first year students 'may accept the principle of autonomous learning but need help in becoming autonomous learners'. I feel the formative assessment techniques employed in the teaching of this module were extremely valuable for the learners in building their confidence, helping them to understand expectations in higher education and facilitating their transition from school and as a consequence helped them towards the goal of becoming autonomous learners. For myself, I learned that formative assessment can actually make a difference. Offering support for students in this way is certainly not a 'dumbing down' of higher education but an important educational tool which makes use of the natural process of learning through practice, asking questions and being able to make mistakes. It certainly confirms the views of Phil Race (2001) regarding the usefulness of formative assessment in allowing students to 'test the water' in relation to what they are being asked to do. In my own work I feel the briefing paper exercise was particularly helpful in this regard.

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