Improving Student Achievement in a Multidisciplinary Context

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Abstract

This report analyses interim findings of an on-going action research project into the use of assessment criteria and grade descriptors in the assessment process. It uses a multi-disciplinary approach and covers areas as diverse as sports sociology, economics, community and youth studies, and education. The idea is to equip first year students with the tools necessary for raising achievement and to match higher education expectations with their own. This is seen as particularly important with widening access attracting a higher proportion of non-traditional entrants with little exposure to higher education. Assimilation into higher education culture is often a fraught encounter and research (Yorke 2001; Yorke & Thomas 2003) suggests that induction into the requirements of individual subjects, curriculum development and the integration of academic skills can aid retention. The project offers a variety of methodologies emphasizing the 'situated' nature of academic literacy. The immediate benefits from the pilot study of sports studies students have already been demonstrated (Bloxham & West, 2004) and the longitudinal research now being undertaken will indicate whether the type of intervention discussed below can have lasting effects.

Key Words assessment, assessment criteria, grade descriptors, students, academic literacy, action research

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Introduction

This report examines the experience of an action research project funded by an Institute of Learning and Teaching in Higher Education 'Making a Difference Award' for developing students' understanding of assessment. It was piloted with sports studies students in 2002/3 and in 2003/4 has been extended to economics, community and youth studies, education and applied social science students at both undergraduate and postgraduate level.

The article commences with a brief discussion of the theoretical ideas underpinning the project followed by an outline of the various interventions in the different subject areas and their initial findings. It concludes by identifying the elements of the project which require further investigation.

Theoretical and policy context

Rust et al (2003) stress the tacit nature of assessment criteria and the difficulty of transferring such tacit knowledge to others. They draw on the analogy of developing 'connoisseurship' which is largely

about socialisation and experience 'involving observation, imitation, dialogue and practice' (p.152). Higgins (2000), in writing about tutor feedback, points out that students struggle to use it effectively because they are 'simply unable to understand feedback comments and interpret them correctly' (p. 2). He argues that failure of communication has its roots in, amongst other things, the differing and often tacit discourses of academic disciplines from which students are frequently excluded.

This is reinforced in work on 'academic literacy' by Lea and Stierer (2000) which views academic writing as a 'contexualised social practice' where the ground rules are not made explicit to students. They argue that the changing context of higher education, for example increasing student diversity, is important in researching student assessment. Likewise, Haggis and Pouget's (2002) research suggests that the greater heterogeneity of students in contemporary higher education means that we need greater clarity and explicitness about the approaches that students need to adopt in order to deal with 'students' confusion and disorientation in the working context of specific subjects and actual writing tasks, at the time they are experienced' (p. 332).

Thus, a key element of the recent drive towards transparency in assessment, and socialisation into the requirements of academic writing, has been the introduction of a range of practices, for example, common grade descriptors, specified learning outcomes and assessment criteria, self and peer-assessment, formative assessments and use of exemplar assignments (Rust 2002; Rust *et al* 2003).

Of course, expressing standards and criteria in ways that students can understand is enormously difficult. Rust et al suggest that explaining assessment criteria includes the transfer of tacit knowledge which is gained through professional experience; 'something that we know but we find impossible or, at least, extremely difficult to express'(p152). Sadler (1989) wrote

"It is difficult for teachers to describe exactly what they are looking for, although they may have little difficulty in recognising a fine performance when it occurs. Teachers' conceptions of quality are typically held, largely in unarticulated form, inside their heads as tacit knowledge" (p.126, cited in Orsmond *et al* 2000, p35)

Thus, the thrust of national developments in assessment has been the combination of providing transparent assessment information coupled with devising methods to engage students in exploring and understanding the language of assessment. This is the focus of our enquiry. The emphasis in this project is enabling students to boost their achievement in their first year of study by improving their understanding of assessment criteria, grade descriptors and assessment protocols such as referencing. We have adopted a multi-disciplinary approach in recognition of the subject-specific nature of academic conventions with differences in interpretation of language and expectations between disciplines. We were interested to develop methods that were appropriate to different disciplines whilst contributing to our overall understanding of the process of inducting students into academic practice.

The Project and Methodology

The programmes are based in the same higher education institution, a College of HE located in the North of England with 7000 full-time equivalent students. The college offers courses in arts, humanities and social sciences and it is a major national and regional provider of both professional teacher education and non-medical health related education. The college's mission includes a strong regional focus and a concern to strengthen access, equality and opportunity.

The institution has recently developed clear assessment protocols for staff and students. The protocols include making explicit links between learning outcomes and assessment tasks, assessment criteria and common grade descriptors. The latter is a series of statements, for each credit level, which

describe what a student should demonstrate in order to achieve the various grades in the academic marking scale.

The project has adopted an 'action research' methodology involving participative enquiry into their teaching and learning practices by several tutors. It is an approach that offers a direct link between research and professional work without privileging theory over practice, as outlined by Sander (2004):

'The practitioner now assumes responsibility, through personal agency and autonomy, in a democratic setting, for identifying problems, thinking of ways to solve them, carrying out the research, considering the data and using the outcomes to inform professional practice'. (p2)

Multi disciplinary case studies

Sports Studies

The pilot study focused on students on a Level 1 module in sport sociology. They practiced marking using assessment criteria and the college-wide grade descriptors. Subsequently, students undertook double blind peer assessment of their colleagues' summative assessment, a poster. Unlike other studies of peer assessment, the peer marking was itself tutor-marked as an extra incentive for the students to think about the assessment criteria and the writing of feedback. The peer marking and feedback was judged on the extent to which it addressed the assessment criteria for the posters.

Quantitative data, in the form of marks, awarded by students and tutors provided a measure of the relationship between students' ability to mark and the quality of their own work. Questionnaires, designed to help them analyse their learning from the activity and to provide research data on the perceived usefulness of the exercise, were administered during a class session. As this was the session when the students received their marks for the poster, there was a very high questionnaire return rate of over 90%.

The pilot study suggested a variety of positive outcomes. Students' marks improved on average by 6% in comparison with the previous year. Marked by the same tutors, the previous year's students achieved a mean mark of 51.7% (SD 7.4) compared with 55.3% (SD 6.8). Although this is a possible positive indication of the impact of the intervention, the size of the student group and the difficulty of controlling for other factors means that the data is only exploratory at this stage. However, the qualitative research indicated that the students involved in the intervention utilised the assessment criteria in both writing and marking assignments. In addition, a high proportion was able to accurately predict the grade they had achieved for the assignment and the intervention appeared to help students to generate and understand feedback more effectively. At the end of this process they were able to articulate what they needed to do to improve and were very positive about their intention to make changes in the future. A possible reason for the latter outcome is that the exercise forced students to engage with assignment feedback. Furthermore, the fact that the feedback was generated by their peers may have helped to bridge the gap between academic discourse and their usual forms of communication.

The investigation is now turning to the longer-term impact of the initial activity on level 2 students' approach to writing assignments and levels of attainment.

Economics

For the other disciplines, the aims of the project have been the same but it has been carried out in different ways. In economics, the course group comprised approximately half Chinese students with the other half drawn from the UK and the rest of Europe. The majority of the UK students are first generation users of higher education. The group was small with 15 students and met twice-weekly

enabling high levels of interaction between lecturer and student. For the purposes of this investigation we are focusing on a comparison between the Chinese students and the rest of the group.

In class, the students analysed the college-wide grade descriptors. This led to discussions about general issues around grading and a very specific discussion regarding grades and the different requirements between grades. The students were then shown a sample of work from the previous year and asked to mark the work using the grade descriptors. These exemplars had been specifically selected to provide a range of pass grades. In groups of 3, the students discussed the assignments and attempted to grade them.

Student responses were collected via classroom discussion and task sheets designed to help the students reflect on the process of constructing an assignment, analysing the feedback they received and action-planning for future assignments.

This exercise was a multi faceted task: the students found it extremely useful examining the sample. Indeed, for all but one of the students, this was the first time they had seen the standard of work required for higher education. The Chinese students particularly appreciated the activity; just seeing HE level work was identified as valuable. This finding confirms the sense that these students do not lack motivation to do well, but have tended to lack the knowledge of what 'well' means in the UK higher education context.

All the students were particularly concerned with structure rather than content and noted how the assignments were presented, how many pages they contained and what the bibliography looked like. This reinforces Rust et al's (2003) view that students focus on 'visible' criteria when assessing work, possibly because it is easier to assess than other aspects.

The discussion of the grade descriptors was also considered to be useful; these are generally given to the students at the beginning of term in their student handbook and all the students acknowledged that they would not have used them had we not done this exercise. To a lesser extent, this is also the case for the assessment criteria which are contained in the module assessment details and are given at the beginning of the semester. Only a few students said that they had read these and would use them whilst writing their essays.

Analysis is still in the initial stages but one of the interesting results is students' perception of grading especially around the 50-60 % mark, both of UK and Chinese students. One student expected to get 50-60 % for his assignment and thought that he deserved that mark because he had 'only a basic understanding with little essay writing experience'. One of the difficulties in interpreting this result is that students coming from different subject backgrounds may have a different understanding of what a mark of 50-60% represents. Whereas marks above 70% are considered to be outstanding in economics, this may not be the case for students with a maths or accounting background. This student perception of the value of different grades will be something to follow up in future research.

In general, the students appeared to privilege effort over actual attainment. For example, another thought he deserved the same grade because he had 'done a lot of research'. Indeed that was a common theme amongst the students that felt they should get 60% or higher (50% of the students were in this category). Many of the comments were 'done a lot of research', 'included lots of references' and 'did plenty of background reading'. Further analysis of these comments shows no difference in perceptions relating to gender, age or nationality.

Tutors were also concerned that students acted upon assignment feedback. However, in the era of subject reviews, discipline audit trails, periodic reviews and the like, all calling for samples of student work, getting work back to students is a complicated process. At level one though these pressures are reduced; feedback is especially important, indeed vital for students to improve. Actually making the

students summarise the feedback means that they cannot just give it a cursory glance and the changing of feedback into an action for the future could also potentially be beneficial. The intervention here was two fold. Firstly an immediate feedback analysis was carried out using feedback from the first economics assignment. This addressed specific issues and resulted in the development of action plans. Halfway through the second semester the students were given a feedback analysis sheet. On this they had to summarize the feedback they had received from all subjects from the first semester. This was to reinforce the first feedback analysis and to try and create 'building blocks' between modules.

A further interesting result was the importance of a peer group. For students from the UK, the financial reality of higher education today means that they often have other commitments and attend university for contact time only, thus lacking the sense of belonging associated with retention. Indeed the project indicates that the Chinese students have a more coherent peer group within which to discuss academic matters.

Initial analysis from the economics trial lead to the follow conclusions:

- Grade descriptors and marking criteria only become relevant to the student if they are embedded within the curriculum.
- Use of exemplars is particularly beneficial at level 1.
- Feedback dissemination must also be embedded in teaching and learning if the students are to benefit and learn from it.

Youth & Community Studies

The intervention with youth & community Studies students focused strongly on helping them generate and use feedback, relating it to the College Grade Descriptors. 24 students on a post-graduate Diploma in youth and community work (masters level award) were asked to submit a formative essay via a digital drop box on the course's virtual learning environment web page. These essays were then each emailed anonymously to two students who were asked to mark them against the grade descriptors, submitting their marks and feedback in advance of the next course session. The tutor also marked the assignments. At the next class session, the students were asked to complete a proforma in which they were invited to reflect on their assignment and predict their grade in the light of marking two others. They then received their own assignment with the marks and feedback from the tutor and both the peer markers. A second proforma invited the students (who had been both peer markers and peer marked) to summarise the different feedback, framing it in their own words, identifying their strengths and considering what action they needed to take in future essays. The students were also individually told how their marking compared with the tutor's assessment so they could see if they were interpreting the grade descriptors too generously or too harshly. The tutor explained the research aspect of the activity and, where students agreed, the proformas were also photocopied for analysis.

At a further course session, a month later, students were asked to bring in an advanced draft of a second assignment. Time was set aside for students to read another student's draft and give them feedback against the assessment criteria. The students were invited to briefly summarise in writing what they had gained from the process and what action they were going to take as a result.

Early analysis of the proformas suggests that many of the students were able to grade work appropriately. Two thirds indicated that the activity had helped them in a range of ways including a clearer understanding of tutor expectations. A third of the students specifically identified that it had made them understand and use assessment criteria which they had not done when constructing the essay. A particular strength has been the opportunity for students to receive feedback from three different people, giving them a greater chance of understanding it and helping them to identify the important points. Furthermore, only one student complained of confusion because different markers had provided them with conflicting feedback.

Interestingly, the feedback from the second peer marking exercise (in-class task) was notably more positive. All the students offered at least two positive comments with no negative feedback on the experience of assessing each others' draft assignments. One interpretation of this data is that students see peer marking at the draft stage as more useful because they are getting feedback at a point where they feel they can still use it to improve their work. In addition, the feedback is more specific in terms of what they can do. That is, comments about what they had gained from marking the finished assignment were more general, for example: 'helped me see what's expected from the marking criteria' (7 students). Whereas comments about marking the draft assignment were more specific: 'realise where changes need to be made' or similar (11 students), 'other ways of doing the assignment' (15 students), 'on the right track' or 'confidence in my work' (9 students).

This suggests two explanations: firstly a strong reinforcement for the view that students really value formative feedback whilst they are still working on something because they can see a real value and purpose in the process. Secondly, the feedback is likely to be more meaningful because it is related to a specific piece of work that they are engaged in. The process of trying to draw general learning about achievement from the feedback on a specific assignment may be more difficult than tutors realise. Further analysis is currently being undertaken to examine the impact of these interventions on students' future writing.

Tentative conclusions from the case studies

The three case studies discussed here appear to provide clear support for the view that active methods can enhance students understanding of assessment requirements. In particular, they suggest that the move to transparent assessment information is of limited use to students unless it is accompanied by embedded opportunities to engage with the concepts involved. Such opportunities start from the simple chance to handle exemplar documents to activities involving peer assessment and generating and summarising assignment feedback. Furthermore, there is strong support here for the benefit of using peer assessment to provide formative feedback on draft assignments. Students gain in terms of both receiving comments on their own work, but also the opportunity to see other students' approaches to assessment tasks; the chance to learn from each other.

The Future

Whilst this project is only a 'work in progress' at this stage, it is undoubtedly worth pursuing for the benefits to individuals, universities and the public in general of assisting students to become more effective and successful learners. Nevertheless, the initial positive outcomes of all these studies do not guarantee that students will transfer these skills or understanding to future assignments. Consequently, follow-up studies, already underway with the sports studies students, will take place with the other subject groups. These studies are focusing on the processes by which students approach their writing, the extent to which they draw on assessment criteria, grade descriptors, and feedback, and their long-term view of gains achieved by participating in the interventions described above.

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